FOURTEENTH ANNUAL REPORT

OF THE

TOWN OFFICERS

OF THE

TOWN OF NORWOOD,

—— FOR THE ——

Year Ending January 31, 1886.

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FOURTEENTH ANNUAL REPORT

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TOWN OFFICERS

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TOWN OF NORWOOD,

—— FOR THE ——

Year Ending January 31, 1886.

BOSTON:
PRESS OF T. O. METCALF & CO., 48 OLIVER STREET.
1886.

NORWOOD COLLECTION
974.4
Norwood
1886

TOWN OFFICERS FOR 1885-86.

Selectmen, Assessors, Overseers of Poor, Board of Health, and Surveyors of Highways:

GEORGE H. MORSE, *Chairman*, FRANK A. FALES, *Clerk*,
J. EDWARD EVERETT.

Town Clerk:

FRANCIS TINKER.

Treasurer:

L. W. BIGELOW.

Collector of Taxes:

C. WILLIS MORSE.

School Committee:

Rev. GEORGE HILL, term expires March, 1888.
JOSHUA A. CROCKER, term expires March, 1886.
Rev. THERON BROWN, term expires March, 1887.

Engineers of Fire Department:

WILLIAM J. WALLACE, *Chief*, J. F. BOYDEN, *Clerk*,
FRANK A. FALES, FRANCIS W. TURNER.

Auditors:

FRANCIS M. BAKER, GEORGE W. GAY,
THOMAS J. CASEY.

Water Commissioners:

J. EDWARD EVERETT, GEORGE H. MORRILL,
FRANCIS M. BAKER.

Constables:

SUMNER BAGLEY, WARREN E. RHOADES,
PATRICK PENDERGAST, GEORGE H. MORRILL, JR.,
WALTER S. BEAL, JOHN DONOVAN, JR.

Trustees of Public Library:

FRANCIS TINKER, term expires March, 1888.
T. FRANK GUY, term expires March, 1888.
REV. B. W. BARROWS, term expires March, 1887.
HORACE T. ATWOOD, term expires March, 1887.
REV. ELLIS MENDELL, term expires March, 1886.
J. WARREN TALBOT, term expires March, 1886.

Surveyor of Lumber:

AUSTIN E. PRATT.

Measurer of Wood and Bark:

AUSTIN E. PRATT, WILLIAM T. WHEDON.

Public Weighers:

FRANK D. DRAPER, AUSTIN E. PRATT,
GEORGE H. MORRILL, JR.

Superintendent of Streets:

NATHAN A. JOHNSON.

APPROPRIATIONS FOR 1885.

RAISED BY TAX.

Salaries of teachers of public schools,	$6,300 00
Salary of teacher of music,	300 00
Incidental expenses of schools,	1,200 00
School books,	500 00
Repairs on Everett school house,	350 00
Repairs of highways and bridges,	3,000 00
Repairs of sidewalks,	200 00
Removing snow,	500 00
For building extension of Nichols street,	300 00
For building extension of Beech street,	300 00
For building Hoyle street,	300 00
New street, near Patrick Hawkins',	400 00
Lighting streets,	350 00
Fire department,	2,400 00
For the purchase of hose,	500 00
For fire extinguishers,	100 00
Support of poor,	2,000 00
Town officers,	1,800 00
Special police,	150 00
Printing and stationery,	250 00
Incidentals,	400 00
For decorating soldiers' graves,	150 00
Care of old cemetery,	100 00
Interest on water bonds,	1,500 00
Sinking fund,	2,000 00
State tax,	1,665 00
County tax,	1,182 95
Overlays,	420 14
	$28,618 09

APPROPRIATIONS FROM MONEY IN TREASURY.

Dog fund for library,	$253 05
Bank tax for library,	400 00
	$653 05

VALUATION OF 1885.

Real estate,	$1,618,928 00
Personal,	447,014 00
Total amount of property taxed,	$2,065,942 00

Number of polls,	880
Rate of taxation on $1,000,	$13 00
Number of houses,	511
Number of horses,	271
Number of cows,	420
Number of acres of land,	6,216

REPORT OF THE SELECTMEN.

The Selectmen of the Town of Norwood, as required by the By-Laws of the town, herewith present an account of moneys for which orders have been drawn on the Town Treasurer during the year ending January 31, 1886, together with the accounts of the Treasurer and Collector, with the report of the auditors thereon. Also, the Vital Statistics of the town for the year 1885.

SCHOOLS.

EVERETT SCHOOL.

Paid Horace T. Atwood,	18	weeks,	$549 00
Mary S. Phillips,	18	"	234 24
Fannie R. Waterman,	20	"	263 20
S. Louisa Rhodes,	19	"	213 75
Francis E. George,	$2\frac{3}{5}$	"	29 25
Marie Burnham,	16	"	179 16
A. E. Park,	19	"	196 42
Mary A. Allen,	$18\frac{3}{5}$	"	186 00
Ida J. Everett,	34	"	346 00
Lizzie E. Tucker,	38	"	380 00
Elizabeth F. Reid,	8	"	93 00
Helen E. Chandler,	30	"	330 00
M. Faustena Day,	23	"	138 00
			$3,138 02

BALCH SCHOOL.

Paid Florence Hill, 34 weeks,	$374 00
Viola F. Littlefield, 38 weeks,	380 00
	$754 00

NORTH SCHOOL.

Paid Lydia B. Thompson, 38 weeks,	$399 50
Jennie P. Baker, 38 weeks,	380 00
	$779 50

EAST SCHOOL.

Paid Alice L. Barron, 30 weeks,	$315 00
Martha B. Parker,	380 00
	$695 00

TEACHER OF MUSIC.

Paid Emma T. Mitchell, 38 weeks,	$266 00

INCIDENTAL EXPENSES OF EVERETT SCHOOL.

Paid Jarvis Fairbanks, as janitor,	$120 00
" " sawing wood,	9 00
C. W. Hartshorne, for coal,	156 88
J. E. Hartshorn, for coal,	18 71
John Nugent, for wood,	33 25
George Hill, for service pipe,	10 78
" " for water rates,	15 00
Geo. L. Maker & Co., for labor and supplies,	1 50
Wm. McLellan, for labor and supplies,	77 16
Herbert Tucker, for labor and supplies,	24 57
Amount carried forward,	$466 85

Amount brought forward,	$466 85
Paid O. N. Bingham, for labor and supplies,	209 22
L. W. Bigelow, for supplies,	2 50
Ingalls & Kendricken, for supplies,	146 51
Tyler Thayer, for labor and supplies,	32 67
Enos Lane, for painting,	4 90
C. F. Whitney, for express,	3 50
George B. Talbot, for muck,	4 50
E. E. Pratt & Son, for painted canvas,	4 00
George W. Gay, for insurance policy,	42 00
Bridget Leonard, for cleaning and sweeping,	148 00
	$1,064 65

INCIDENTALS FOR BALCH SCHOOL.

Paid N. B. Whittier, janitor,	$77 19
Austin E. Boyden, sawing wood,	3 50
J. E. Hartshorn, for coal,	34 02
William McLellan, labor and supplies,	97 64
G. L. Maker & Co., labor and supplies,	202 26
Herbert Tucker, labor and supplies,	6 57
E. J. Fahy, labor and supplies,	13 50
George H. Morse, for fence posts,	7 50
Esther Bateman, for carrying children to school,	25 00
Mrs. J. Fitzgerald, cleaning and sweeping,	38 50
	$505 68

INCIDENTALS FOR EAST SCHOOL.

Paid Timothy Linahan, as janitor,	$50 00
" " sawing and splitting wood,	3 75
J. E. Hartshorn, for coal,	81 55
John Nugent, for wood,	5 00
Webb Bros., for supplies,	75
George L. Maker, for supplies,	18 50
Amount carried forward,	$159 55

Amount brought forward,	$159 55
Paid M. H. Howard, for labor and supplies,	1 60
Herbert Tucker, for labor and supplies,	5 35
George Hill, labor and supplies,	75
F. A. Fales, for cement,	70
William Foremean, for supplies,	1 00
E. Wheelock, for supplies,	1 40
Mrs. M. Ryan, sweeping and cleaning,	46 67
Timothy Linahan, ½ cord wood,	3 00
	$220 02

INCIDENTALS FOR NORTH SCHOOL.

Paid Jarvis Fairbanks, as janitor,	$45 00
" " labor and supplies,	1 87
J. E. Hartshorn, for coal,	98 73
John Nugent, for wood,	5 00
Herbert Tucker, labor and supplies,	13 30
George Hill, labor and supplies,	10 96
William McLellan, labor and supplies,	2 56
George L. Maker, for supplies,	50
Thomas E. Clary, insurance policy,	45 00
Geo. B. Talbot, for muck,	1 50
Edward Fahy, for painting,	3 50
Bridget Leonard, cleaning and sweeping,	28 20
Enos Lane, for painting,	86
M. H. Howard, for labor and supplies,	28 00
	$284 98

MISCELLANEOUS FOR SCHOOLS.

Paid J. A. Crocker, for sundries,	$65 38
L. W. Bigelow, for supplies,	1 88
M. H. Howard, for labor and supplies,	12 59
William Foremean, for labor and supplies,	6 38
Warren E. Rhoades, as truant officer,	12 00
	$98 23

SCHOOL BOOKS.

Paid J. A. Crocker, for books,	$573 64
Iverson, Blakeman, Taylor & Co., for books,	16 67
Knight, Adams & Co., for books,	14 06
	$604 37

RECAPITULATION ON SCHOOLS.

Total payment of teachers,		$5,366 52
" " of music teacher,		266 00
Incidentals at Everett school,		1,064 65
,, at Balch school,		505 68
" at East school,		220 02
" at North school,		284 98
Miscellaneous on schools,		98 23
School books,		604 37
		$8,410 45
Appropriation,	$8,650 00	

HIGHWAYS.

Paid George H. Morse,	labor at town pit,			$8 50
Dennis McCarty,	" " " "			4 25
Martin Curran,	" on Railroad avenue,			4 76
Nathan A. Johnson,	" " sidewalks,			303 86
N. A. Johnson,	979½	hours, at	25 cts.,	244 88
N. A. Johnson, man,	924	"	17	157 08
Morgan Curran,	1328	"	"	225 76
Patrick Conley,	1095½	"	"	186 24
William Gearry,	912½	"	"	155 13
Thomas Ford,	477½	"	"	81 18
Michael Conley,	305	"	"	51 85
John Baker,	177½	"	"	30 18
Patrick McManus,	140	"	"	23 80
Thomas Lyden,	183½	"	"	31 20
Bartlett Conley,	196	"	"	33 32
John Gaynor,	130½	"	"	22 19
Wm. Gillooly's man	90	"	"	15 30
Wm. Morrissey,	85	"	"	14 45
James Flaherty,	135	"	"	22 95
Robert Oldham,	135	"	"	22 95
John Farrell,	65	"	"	11 05
Patrick Fahy,	107½	"	"	18 28
Thomas Hefferin,	148	"	"	25 16
Ned Murphy,	30	"	"	5 10
Thomas Flood,	30	"	"	5 10
Dennis Hayes,	30	"	"	5 10
Patrick Leonard,	30	"	"	5 10
Daniel Donovan,	18	"	"	3 06
Michael Foley,	100	"	"	17 00
John Corbett,	522¼	"	"	88 79
James Hill,	20	"	"	3 40
Dennis McCarty,	140	"	"	23 80
Isaiah Merrifield,	5	"	"	85
	Amount carried forward,			$1,851 62

	Amount brought forward,		$1,851 62
Paid Daniel Murphy,	240 hours, at 17 cts.,		40 80
Thomas Drummy,	175 " "		29 75
William Bateman,	15 " "		2 55
Frank Strout,	101 " "		17 17
John Pond,	8 " "		1 36
Thomas Morgan,	153 " "		26 01
Harry Rhoades,	61 " "		10 37
James Friary,	32½ " "		5 53
John Nugent,	as per bill,		72 34
Curtis Fisher,	" "		80 78
George H. Morse,	" "		56 85
Sylvester Hawes,	" "		60 18
Fred Hartshorne,	" "		84 15
Thomas Kerrissey,	" "		15 30
Eben Gay,	" "		22 95
Albert Dean,	" "		6 92
Eugene Sullivan,	" "		5 10
John Fitzgerald,	" "		23 88
Cornelius Sullivan,	" "		10 20
Michael Burke,	" "		15 64
N. A. Johnson,	team 309 2½ hours,		525 73
George H. Morse,	103 two-horse loads gravel,		10 30
George H. Morse,	5 one-horse loads gravel,		30
George B. Talbot,	100 two-horse " "		12 00
George B. Talbot,	31 one-horse " "		2 48
E. F. Talbot, estate,	605 two-horse " "		72 60
E. F. Talbot, estate,	318 one-horse " "		25 44
John Ellis,	175 two-horse " "		14 00
Eben Gay,	54 " " "		5 40
Edward Talbot,	64 " " "		6 40
David Talbot,	16 " " "		00 00
Winslow Bros.,	55 " " "		00 00
George Talbot,	2 " " "		16
Town pit,	731 " " "		00 00
	Amount carried forward,		$3,114 26

	Amount brought forward,		$3,114 26
Paid R. R. bank,	238	two-horse loads gravel,	00 00
Rock hill,	48	" " "	00 00
Newman Fales,	73	" " "	7 30
Jabez Sumner, for blasting rock,			30 30
Wm. Reed & Son,		for powder and fuse,	4 74
J. S. Trowbridge & Co.,		" "	3 90
George Talbot, for labor,			15 18
N. B. Whittier, sharpening drills and picks,			17 83
Oliver White, for gravel screen,			7 50
George Tyler, for scraper plates and express,			8 50
Joseph Breck & Sons, shovels, picks and rakes,			9 68
J. W. Roby & Co., for covering stone,			4 75
George B. Talbot,	" drain pipe,		20 48
N. A. Johnson,	" labor on culverts,		51 59
			$3,296 01

NEW STREET AT HOYLE'S.

Paid N. A. Johnson,		$85 72
John Nugent, for labor and material,		163 20
		$248 92
Appropriation,	$300 00	

EXTENSION OF BEECH STREET.

Paid John Nugent, as per contract,		$250 00
Appropriation,	$300 00	

EXTENSION OF NICHOLS STREET.

Paid John Nugent, as per contract,		$300 00
Appropriation,	$300 00	

NEW STREET NEAR PATRICK HAWKINS'.

Paid Fred Hartshorne, as per contract,		$250 00
Appropriation,	$400 00	

NEW STREET, FROM RAILROAD AVENUE TO PROSPECT STREET.

Paid John Nugent, on account,	$1150 00
N. A. Johnson, for labor and material,	81 96
	$1231 96

No appropriation.

WALNUT AVENUE.

Paid N. A. Johnson, in full to balance as per contract,		$175 00
Balance on appropriation of 1884,	$480 00	

BRIDGES.

EVERETT STREET BRIDGE.

Paid Tyler Thayer, labor and stock,	$20 20

WASHINGTON STREET BRIDGE.

Paid George H. Morse, labor,	$19 80
Jabez Sumner,	9 50
G. Van Buskirk,	11 25
	$40 55

MORSE STREET BRIDGE.

Paid Tyler Thayer, stock and labor,	$39 35

WATER STREET BRIDGE.

Paid Tyler Thayer, stock and labor,	$115 40

BROOK STREET BRIDGE.

Paid George H. Morse, for posts,	$ 3 40
M. H. Howard, stock and labor,	24 56
	$27 96

REMOVING SNOW.

Paid N. A. Johnson, in full,		$156 93
Appropriation,	$500 00	

RECAPITULATION.

Paid repairs of highways,	$3,296 01
Street at Hoyle's,	248 97
Street near Patrick Hawkins',	250 00
Extension of Beech street,	250 00
" " Nichols street,	300 00
Street from Railroad avenue to Prospect,	1,231 96
Walnut avenue,	175 00
Bridges,	243 46
Removing snow,	156 93
	$6,152 33

APPROPRIATIONS.

Highways,	$4,300 00
Sidewalks,	200 00
Removing snow,	500 00
	$5,000 00

FIRE DEPARTMENT.

Washington Engine, No. 1.

Paid Frank W. Talbot, pay of men,		$1,380 50
H. N. Fales, for labor and supplies,		4 85
J. W. Roby & Co., for labor and supplies,		9 40
Albert Fales, for wood,		2 25
J. E. Hartshorn, for coal,		6 11
Howe & French, for alcohol,		3 00
F. A. Fales,	" "	2 65
William Fisher,	" supplies,	1 74
John Nugent,	" drawing engine,	14 25
L. P. Baker,	" for services as steward,	69 00
		$1,493 75

America Engine, No. 2.

Paid W. L. Morse, clerk, pay of men,	$1,318 50
J. F. Boyden, for supplies,	1 00
Walter S. Phalen, for services as steward,	52 00
N. A. Johnson, drawing engine to fires,	24 25
	$1,395 75

Hook and Ladder Co., No. 1.

Paid Ward L. Gay, clerk, for pay of men,	$456 50
W. C. Cottrell, for services as steward,	18 85
C. V. Cottrell, for labor and supplies,	5 20
F. W. Turner, for supplies,	19 00
J. W. Roby & Co., for supplies and repairs,	5 36
C. E. Webb, Trustee Village Hall, storing truck,	25 00
	$529 91

MISCELLANEOUS FIRE EXPENSES.

Paid William J. Wallace, supplies, labor and express,	$39	45
Charles A. Plummer, ringing fire bell,	5	00
James Boyd & Son, for supplies,	86	35
Town of Dedham, for services of fire department at car shop fire,	128	00
M. H. Howard, labor and supplies,	13	48
Andrew J. Morse & Son, for supplies,	16	00
F. A. Fales, for teams at car shop fire,	6	50
Warren E. Rhoades, refreshments at car shop fire,	34	00
Warren E. Rhoades, refreshments at Tisdale fire,	15	00
William Foremean, for supplies,	5	75
E. Wheelock, for supplies,	2	21
C. F. Whitney, for express,	1	40
G. E. Metcalf, drawing engine and hose carriage,	12	00
Wm. J. Wallace, for pay of Engineers,	75	00
Wm. J. Wallace, for team and men clearing snow from hydrants,	3	50
	$443	64

NEW HOSE AND FIRE EXTINGUISHERS.

Paid James Boyd & Son, hose and fire extinguishers,	$580	00
Harden Hand Grenade Co., for grenades,	16	50
F. A. Fales, express on hose and grenades,	3	15
	$599	65

RECAPITULATION.

Paid Engine Co. No. 1,	$1,493	75
" " " 2,	1,395	75
Hook and Ladder Co. No. 1,	529	91
Miscellaneous,	443	64
New hose and fire extinguishers,	599	65
	$4,462	70
Appropriation, $3,000 00		

EXPENSES OF WATER COMMITTEE.

Paid H. McQuillen, for printing,		$9 00
Heliotype printings for maps,		35 00
T. O. Metcalf & Co., for printing,		50 00
Norwood *Review*, for printing,		4 00
J. E. Everett, cash paid,		15 00
		$113 00
Balance of appropriation of 1884,	$650 13	

NORWOOD WATER WORKS.

Paid L. W. Bigelow, for interest on water bonds,		$1,500 00
F. M. Baker, for sinking fund,		2,000 00
		$3,500 00
Appropriation,	$3,500	

SUPPORT OF POOR.

MRS. L. P. LUND.

Paid weekly allowance,	$64 00
Martha J. Morse Boyd, one year's rent,	99 00
J. E. Hartshorn, for coal,	26 23
Sylvester Hawes, for wood,	5 00
W. S. Clark, for milk,	11 69
T. J. Casey, for flour,	6 50
C. E. Webb, for flour,	6 15
W. L. Kingsbury, for flour,	6 50
F. A. Fales, for flour,	6 00
Mrs. J. Horgan, for shoes,	9 05
	$240 12

MRS. JOHANNA FITZGERALD.

Paid William Fisher, for rent,	$60 00
H. B. Baker, for groceries,	25 64
Geo. H. Morse, for wood,	19 00
J. E. Hartshorn, for coal,	6 66
	$111 30

MRS. M. RYAN AND CHILD.*

Paid C. L. Smith, for rent,	$90 00
J. E. Hartshorn, for coal,	19 59
Albert Fales, for wood and milk,	34 10
	$143 69

* Paid by Town of Medford.

JOSEPH MORSE.

Paid John Nugent, for rent,	$27 50

MRS. OBER AND DAUGHTER.

Paid Town of Canton,	$238 00
Geo. H. White, for milk,	24 33
	$262 33

JOSEPH BAKER.

Paid C. Readle, for board,	$306 00
L. W. Bigelow, for goods,	19 37
Francis Tinker & Co., for medicine,	4 25
Chas. B. Dexter, funeral expenses,	26 00
	$355 62

JOHN FARRELL.

Paid F. A. Fales, for 1 barrel flour, 1884,	$7 50
" " " " 1885,	6 00
	$13 50

JOHN DRAPER.

Paid City of Boston,	$5 16

CARE OF LOCKUP.

Paid Mrs. Jane Ellis, board of Gen. B. Guild,	$234 71
L. W. Bigelow, for goods for Gen. B. Guild,	36 68
J. E. Hartshorn, for coal,	18 18
E. Wheelock, for supplies,	84 40
F. M. Cragin, medical attendance,	1 50
F. A. Fales, car fare for poor travelers,	1 40
	$376 87

Number of tramps at lockup for the year,	1,762

PERSONS HAVING MILITARY SETTLEMENTS.

Paid Town of Dedham,	$96 37

NANCY S. BLANDIN.*

Paid F. A. Fales, aid rendered,	$10 00

* Paid by Town of Wellesley.

MRS. PATTERSON AND SON.

Paid Town of Russell,	$36 00

MARGARET McCAULLY.

Paid weekly allowance,	$25 00
C. F. Everett, for meat,	6 77

(To be refunded by the State.)

Paid D. S. Fogg, as Town Physician,	$50 00

RECAPITULATION.

Settlement in Norwood.

Expense for Mrs. Lund,		$240 12
" " " Johanna Fitzgerald,		111 30
" " " Ober and daughter,		262 33
" " Joseph Baker,		355 62
" " John Farrell,		13 50
" " John Draper,		5 16
" " Lockup and Major,		376 87
" " Military settlements,		96 37
" " Mrs. Patterson and son,		36 00
" " Joseph Morse,		27 50
" " D. S. Fogg,		50 00
		$1,574 77
Appropriation,	$2,000 00	

Settlement elsewhere.

Mrs. Ryan,	$143 69
Margaret McCaully,	31 77
Nancy S. Blandin,	10 00
	$185 46

OLD CEMETERY.

Paid John C. Pond, for labor and care,		$100 00
Appropriation,	$100 00	

LIQUOR SEIZURES EXPENSES.

Paid John T. Wilson, fees,		$91 32
Law and Order League of Boston,		55 62
Warren E. Rhoades, expenses,		9 00
W. S. Beal, expenses,		9 00
		$164 94
Balance of appropriation of 1884,	$767 90	

GEO. K. BIRD, POST NO. 169, G. A. R.

Paid A. E. Pratt, sum granted Post,		150 00
Appropriation,	$150 00	

ADVERTISING, PRINTING AND STATIONERY.

Paid T. O. Metcalf & Co.,		$122 00
Norwood *Review*,		3 00
Norwood *Advertiser*,		6 75
Francis Tinker & Co., for stationery,		4 83
F. W. Crooker,		5 25
		$141 83
Appropriation,	$250 00	

LIBRARY.

Paid L. E. Hartshorn, for rent,		$75 00
J. W. Talbot, as librarian,		150 00
"	supplement for library,	19 00
"	for books and rebinding,	369 65
"	express on books,	4 00
"	for wood,	2 50
"	for coal,	3 13
		$623 28

Appropriation:

Dog fund,	$253 05
Bank tax,	400 00
	$653 05

LIGHTING STREETS.

Paid M. H. Howard,	care	1	lamp,	12	mos.,	1884,	$9 00
C. A. Plummer,	"	1	"	12	"	1884,	9 00
H. Rhoades,	"	1	"	12	"	1884,	9 00
M. W. B. Kerrisey,	"	1	"	24	"	'83–4,	18 00
William Bateman,	"	1	"	12	"	1884,	9 00
D. S. Fogg,	"	1	"	12	"	1885,	9 00
George Shumway,	"	4	"	12	"		36 00
"	"	1	"	2	"		1 50
John K. Foster,	"	1	"	12	"		9 00
Lester C. Billings,	"	1	"	16	"		12 00
H. E. Morse,	"	1	"	12	"		9 00
E. F. Fletcher	"	1	"	12	"		9 00
Charles G. Ellis,	"	2	"	12	"		18 00
Estate of F. Morse,	"	1	"	12	"		9 00
						Amount carried forward,	$166 50

	Amount brought forward,					$166 50
Paid L. E. Ingraham,	care	1	lamp,	12	mos.,	9 00
C. E. Webb,	"	1	"	12	"	9 00
F. W. Crooker,	"	2	"	12	"	18 00
Bernard Bigelow,	"	3	"	12	"	27 00
John Folan,	"	1	"	12	"	9 00
H. L. Hayford,	"	1	"	12	"	9 00
F. M. Baker,	"	1	"	12	"	9 00
Sumner Bagley,	"	1	"	12	"	9 00
Edwin E. Hartshorn,	"	1	"	9	"	6 75
George H. Morse,	"	1	"	12	"	9 00
John E. Smith,	"	1	"	24	"	18 00
B. N. Mylod,	"	1	"	8	"	6 00
H. W. Alden,	"	1	"	12	"	9 00
P. J. Mahoney,	"	1	"	16	"	12 00
Peter Corbett,	"	1	"	12	"	9 00
G. E. Sanborn,	"	1	"	11½	"	8 63
Silas Boyden,	"	1	"	15	"	11 50
L. P. Baker,	"	1	"	12	"	9 00
Mrs. Moses Rhoads,	"	1	"	12	"	9 00
Jarvis Gay,	"	1	"	12	"	9 00
Ellis Boyden,	"	1	"	12	"	9 00
M. H. Howard,	"	1	"	12	"	9 00
George F. Force,	"	1	"	8	"	6 00
Frank W. Bateman,	"	1	"	8	"	6 00
W. A. Metcalf,	"	1	"	12	"	9 00
Mary M. Morse,	"	1	"	6	"	4 50
Norman Thayer,	"	1	"	12	"	9 00
						$434 88
Appropriation,				$350 00		

MISCELLANEOUS.

Paid L. E. Hartshorn, for rent of Selectmen's room,	$75 00
A. G. Webb, for use of village hall,	26 00
C. E. Webb, " " "	16 00
Dr. L. H. Plimpton, returning births,	6 75
" " " professional services,	3 00
Dr. F. M. Cragin, returning births,	1 50
Dr. I. S. Fogg, returning births,	12 00
Chas. B. Dexter, returning deaths,	4 25
Caleb Ellis, surveying and drawing plans for new streets,	42 00
Thos. E. Clary, insurance policies, pumping station,	150 00
Thos. E. Clary, insurance policies, Water Commissioner's office and furniture,	15 75
James Boyd & Son, for hydrant connections,	34 10
C. Willis Morse, for cash paid on account of tax sale of Luther Eaton land.	8 35
H. E. Mylod, for building sidewalk on Cottage and Nichols streets,	10 00
George Hill, taking census,	15 00
A. W. Mitchell, Town seal and fees,	6 00
D. B. Farrington, lock for Registrar's desk,	1 25
George V. Dean, sawing and splitting wood,	1 70
E. Wheelock, oil for Selectmen's room,	1 42
Francis Tinker & Co., paid express,	2 50
Warren E. Rhoades, one day to Taunton,	3 00
" " " expense on James Nelson case,	5 00
Warren E. Rhoades, posting warrants,	12 00
" " " for sealing weights and measures,	15 00
Sumner Bagley, distributing reports,	6 00
" " dog warrants,	10 00
Amount carried forward,	$483 57

	Amount brought forward,	$483 57
Paid P. J. Pendergast, posting warrants,		3 00
F. A. Fales, for postage stamps,		1 00
F. A. Fales, for cash paid, copying valuation for printing,		12 00
Francis Tinker, for collecting, recording and returning births, marriages and deaths,		53 30
		$552 87
Appropriation,	$400 00	

TOWN OFFICERS, TO MARCH 1, 1886.

Paid George H. Morse, Selectman, Assessor, Overseer of Poor, Board of Health, and Surveyor of Streets,		$300 00
Frank A. Fales, Selectman, Assessor, Overseer of Poor, Board of Health, and Surveyor of Streets,		300 00
J. Edward Everett, Selectman, Assessor, Overseer of Poor, Board of Health, and Surveyor of Streets,		300 00
Francis Tinker, Town Clerk,		75 00
L. W. Bigelow, Town Treasurer,		200 00
C. Willis Morse, Collector of Taxes,		428 68
W. S. Beal, Special Police,		150 00
Warren E. Rhoades,	Police duty,	19 50
Sumner Bagley,	" "	9 00
P. J. Pendergast,	" " 1884–5,	18 00
Patrick Fahy,	" " 1883,	9 00
George H. Morrill, Jr.,	" " 1885,	9 00
Caleb Ellis,	Registrar of voters, 1885,	25 00
D. B. Farrington, for 3,	" " 1885,	75 00
	Amount carried forward,	$1,918 18

	Amount brought forward,		$1,918 18
Paid D. B. Farrington, for Registrar of voters, 1884,			150 00
George Hill, as School Committee, one year,			60 00
J. A. Crocker, " " "			60 00
Theron Brown, " " "			60 00
			$2,248 18
Appropriation,	$1,800 00		
Special Police,	150 00		

RECAPITULATION.

Total paid for Schools,		$8,410 45
Highways,		3,296 01
Water committee,		113 00
Interest on water bonds,		1,500 00
Sinking fund,		2,000 00
Hoyle street,		248 97
Beech street,		250 00
Nichols street,		300 00
Hawkins street,		250 00
Casey street,		1,231 96
Walnut avenue,		175 00
Removing snow,		156 93
Bridges and culverts,		243 46
Cemetery,		100 00
Prosecution of illegal sale of liquors,		164 92
Fire department,		3,863 05
New hose and fire extinguishers,		599 65
Support of Norwood poor,		1,574 77
Support of non-resident poor,		185 46
Printing,		141 83
Amount carried forward,		$24,805 46

	Amount brought forward,	$24,805 46
Total paid for	Library,	623 28
	Lighting streets,	434 88
	Incidentals,	552 87
	Town officers,	2,248 18
	George K. Bird Post,	150 00
		$28,814 67

RESOURCES.

The resources of the town applicable to the payment of expenses for the current year are:

Cash in treasury,	$521 90

ESTIMATES.

As required by the By-laws, we submit the following estimates for the ordinary expenses of the ensuing year:

For	Salaries of teachers in schools,	$6,600 00
	Incidental expenses of schools,	1,200 00
	Highways,	3,000 00
	Bridges and culverts,	1,500 00
	Sidewalks,	500 00
	Removing snow,	500 00
	Fire department,	2,000 00
	Amount carried forward,	$15,300 00

Amount brought forward,	$15,300 00
For Support of poor,	2,000 00
Town officers,	2,200 00
Lighting streets,	500 00
Library,	300 00
Cemeteries,	100 00
Special police,	150 00
Printing and stationery,	350 00
Incidentals,	600 00
School books,	500 00
Sinking fund,	2,000 00
Interest on water bonds,	3,000 00
	$27,000 00

REMARKS.

The foregoing accounts show the expenditures for which orders have been drawn on the Treasurer for the year ending Jan. 31, 1886.

They also show an increase in some departments over the last year. The small amount of money in the treasury, compared with last year, we will explain in the following manner.

At the town meeting, on March 30, 1885, it was voted to build a new street leading from Railroad avenue, and the sum of $1,300 was appropriated. This vote we thought to be illegal and therefore did not deem it best to assess a tax for that sum; but as the town had voted in good faith, the street was built and the money drawn from the treasury.

The large number of fires during the year caused the expense of the Fire Department to exceed the appropriation by the sum of $1,462 70.

The excess over the appropriation on the highways was due mainly to the repairs that had to be made on bridges and culverts.

The School Committee have drawn about $700 more than the appropriation, which they will probably explain in their report.

The number of street lamps has increased during the year making that department exceed the appropriation.

The new valuation of the town, which was made by the Assessors in May last, cost $285 20. This sum, with the salary of the Board of Registrars for two years, has made an increase in the amount paid the town officers.

We have recommended an increase in the appropriations for town officers, sidewalks, bridges and culverts, street lamps and printing, and a reduction on the Fire Department.

The sum of $164 92 has been expended for the prosecution of illegal sales of liquor during the year, and we would recommend, that if any money is granted this year, that the town choose an agent whose duty shall be to take charge of the entire matter and see that the law is strictly enforced.

The suit of Flanders *vs.* Town of Norwood has been decided by the Supreme Court in favor of the town.

We have not asked for any increase in the appropriation for the repairs of highways, as we think it best to wait till the water works are completed.

The late severe storm caused a great deal of damage to the bridges and culverts. The bridge on Short street, being washed away, must be rebuilt, and the large culvert under Washington street, near the high bridge, will have to be relaid at a large expense. Therefore, we think it advisable to ask for a separate appropriation for bridges and culverts.

To the estimate we have made for the ensuing year, must be added the State and County tax, which will make, in round numbers, about $30,000. With the valuation of 1885, to raise this sum the rate of tax will be about $14 50 per thousand. Each additional $1,000 voted will add about fifty cents to this rate.

We trust that the voters at the March meeting will bear these facts in mind, and be careful in their appropriations.

Respectfully submitted,

GEO. H. MORSE,
FRANK A FALES,
J. E. EVERETT,
Selectmen of Norwood.

Norwood, February 18, 1886.

C. WILLIS MORSE, Collector, *in account with the* TOWN OF NORWOOD.

1885.	Dr.	
To amount of commitment,		$28,618 09
" " supplementary tax,		21 00
interest on taxes unpaid Nov. 1,		49 47
		$28,688 56

	Cr.	
By amount paid C. C. Churchill, County Treas.,		$ 1,182 95
" " " L. W. Bigelow, Town Treas.,		27,505 61
		$28,688 56

Respectfully submitted,

C. Willis Morse, *Collector.*

Norwood, Feb. 1, 1886.

We hereby certify that we have examined the books and accounts of C. Willis Morse, Collector of Taxes for the year 1885, and that the above is a correct statement of taxes committed to, and of payments made by him.

F. M. BAKER,
THOMAS J. CASEY, } *Auditors.*

LIST OF JURORS.

As prepared by the Selectmen on February 9th, to be presented to the voters of the town for revision and acceptance at the annual meeting on the first Monday in March.

Casper F. Achorn,
William Bateman,
Edgar L. Bigelow,
Frank W. Bateman,
George O. Capen,
Frank D. Colburn,
Thomas J. Casey,
Thomas Dyer,
Henry W. Dean,
Caleb Ellis,
Henry R. Ellis,
Jarvis G. Fairbanks,
George Hill,
George E. Hawes,
Cephas Hoar,
Albert E. Ware,

Isaiah Merrifield,
Frederick L. Fisher,
J. Edward Everett,
James A. Hartshorn,
Joseph E. May,
Albert W. Metcalf,
Thomas F. Mahoney,
Richard Oldham,
Charles H. Rogers,
Edgar F. Roby,
Austin Sanders,
Samuel E. Chamberlain,
John M. Winslow,
William J. Wallace,
Charles T. Wheelock,
Franklin D. Weatherbee,

GEO. H. MORSE,
FRANK A. FALES,
J. E. EVERETT,
} *Selectmen of Norwood.*

Norwood, February 9, 1886.

DR. L. W. BIGELOW, TREASURER, *in*

1885.

Feb. 1.	To balance in treasury	$2,426	50
	J. W. Talbot, librarian, excess of appropriation for 1884	18	04
	Town of Medford for assistance to Mrs. Ryan	78	68
	Borrowed in anticipation of taxes	7,500	00
	Geo. H. Morse, auctioneer's license	2	00
	Francis Tinker & Co., liquor license	1	00
	Estate of Rufus P. Sumner for taxes	10	95
	H. R. Ellis, billiard saloon license	2	00
	H. R. Ellis, roller skating rink license	2	00
	J. C. Lane, for rent	20	00
	Corporation tax	108	31
	National bank tax	745	75
	State aid	12	00
	Insurance on North school house	28	00
	Dog license	252	61
	Income of school fund	174	90
	C. Willis Morse, Collector of taxes for year 1885,	27,505	61
		$38,888	35

account with the TOWN OF NORWOOD. CR.

1885.			
	By Commonwealth of Massachusetts, for liquor license, 1884	$	25
	Amount borrowed	7,500	00
	Interest	119	39
	State tax	1,665	00
	Assessors' orders for abatement	267	14
	Selectmen's orders	28,814	67
		$38,366	45
1886.			
Feb. 1.	Balance in treasury	521	90
		$38,888	35

We hereby certify that we have examined the books and accounts of L. W. Bigelow, Treasurer of the Town of Norwood, and find them correctly kept and the payments duly vouched; and that the foregoing is a true statement of the condition of the Treasury the first day of February, 1886.

F. M. BAKER,
THOMAS J. CASEY, } *Auditors.*

L. W. BIGELOW, Treasurer of Norwood, *in account with the* CEMETERY COMMISSIONERS.

1885. Dr.

Feb. 1.	To balance in treasury	$531 52
	A. G. Webb, for lots and posts	248 00
		$779 52

Cr.

	By Commissioners' orders	$410 95
1886.		
Feb. 1.	Balance in treasury	368 57
		$779 52

We hereby certify that we have examined the books and accounts of L. W. Bigelow, Treasurer of the Town of Norwood, and find them correctly kept and the payments duly vouched; and that the foregoing is a true statement of the condition of the Treasury the first day of February, 1886.

F. M. BAKER,
THOMAS J. CASEY, } *Auditors.*

REPORT OF THE ENGINEERS OF THE FIRE DEPARTMENT.

To the Honorable, the Board of Selectmen, of the Town of Norwood,

GENTLEMEN: — During the year ending Feb. 1, 1886, the Department has been called out to fires and alarms ten times, as follows: —

April 16, Sumner Bagley's woods. Cause, unknown.

April 21, woods near house of Silas Capen. Cause, unknown.

May 7, barn of Catharine Readle, Nahatan street. Value $400; insured, $250; insurance paid, $250; cause, unknown.

May 26, alarm, burning of tar at house of John Smith, Day street. Cause, boiling over of tar.

June 20, woods near house of T. Dolliher, Nahatan street. Cause unknown.

July 8, dwelling house of Eugene Sullivan, Walpole street. Insured, $1,600; damaged, $500; insurance paid, $500; cause, unknown.

July 19, N. Y. and N. E. R. R. car shops. Partial loss, $70,714.52; insurance paid, $42,773.64; cause, unknown.

August 1, house of heirs of John Smith, Prospect street. Insured, $400; damage, $15.00; insurance paid, $15.00; cause of fire, struck by lightning.

August 15, barn of Josiah Tisdale, Nahatan street. Value, $500; insured, $500; insurance paid, $500; cause, unknown.

November 16, alarm taken from ringing the bell of the Orthodox church, for a temperance meeting. Cause, "Muscular Ministers."

RESERVOIRS.

The reservoirs are all in good repair, and the introduction of water in the town, will doubtless prevent any more money being expended on them.

HOSE.

The Department now has 1,500 feet of reliable hose, and 450 feet of unreliable. We would recommend the purchase of 1,000 feet, as more hose will be needed on hydrants under the new system.

HOOK AND LADDER TRUCK No. 1.

This truck is in first-class condition.

FIRE ENGINES.

Engine No. 1 is in good serviceable condition.

Engine No. 2 is in first-class condition.

EXPENDITURES.

Amount expended, including the purchase of hose and fire extinguishers,	$4,462 70
Amount appropriated, including hose and extinguishers,	3,000 00
	$1,462 70

We have had more alarms and disastrous fires during the past year, than in any previous year in the experience of the Fire Department, including the car shop fire, which cost the sum of $1,325 of the above amount.

We would recommend that the sum of $2,000 be raised and appropriated for the Fire Department the coming year.

The Fire Department has responded readily to all calls for their services, and attended promptly to their duties.

RE-ORGANIZING THE FIRE DEPARTMENT.

The introduction of water into the town, and the use of hydrants for fire purposes, will necessitate a change in the Fire Department. As a part of the line of pipe not having been laid, and hydrants placed, in the district where three fires occurred last year, the Engineers decided it was best not to reorganize the Fire Department at the present time, but extended the services of the company six months longer, during which time the lines will be completed. An Article will be placed in the Warrant for the next town meeting, to see what change, if any, shall be made in the Fire Department, thus bringing it before the voters of the town to make such changes as may seem proper. The Engineers, after discussing the question thoroughly, would make the following suggestions: that the two Fire Companies be reduced to Hose Companies consisting of fifteen men each; the Hook and Ladder Company to remain as it is; this would reduce the Fire Department from ninety-five men to forty-five, which would, in our opinion, answer all purposes in the water district. For fires occurring outside the water district we propose that one

man be appointed with each engine to keep it in proper order, and to take charge of it. Horses should be engaged as now to draw them to fires. The two Hose Companies, and those that could be spared of the Hook and Ladder Company, would be expected to work the engines, which would provide men enough for one company. If both should be needed, volunteers could be placed on them, to be paid the same amount an hour that the firemen are. The volunteer system has worked satisfactorily in other towns. It is several years since a fire has occurred in this district.

THE WANTS OF THE FIRE DEPARTMENT.

In our opinion, to place it in first-class condition, we would propose the purchase of one thousand feet of hose. If a fire should occur opposite a hydrant, in order to bring two lines of hose from said hydrant, one from the right and another from the left, it would take two thousand feet; therefore in order to use our water supply to advantage, we must have more hose.

HOSE CARRIAGES.

The Hose Carriages we have at present are not suitable to carry the amount of hose needed at a fire, especially No. 2, but they would answer for the present, if express wagons were engaged to immediately bring the spare hose to a fire, which could be on the grounds by the time the Hose Companies have their hose in position.

ENGINE HOUSES.

The Hook and Ladder Company need a suitable house to place their truck in. They are now situated in a place without any conveniences, not even a place for a fire; and it is also in a bad place to start their truck to a fire. We would propose that a house be built large enough to accommodate the Truck and Hose Company. The Hose Company will need a hose-tower fifty feet high to dry their hose; also No. 2 will need one attached to their house. It is very necessary that the hose should be thoroughly dried after using, to prevent mildew; we have never yet lost a piece of hose from mildew,—some of which has been in service since 1861,—having given it the best of care. We cannot do this with our present accommodations, and the amount of hose we will need in the Fire Department. No. 1 house needs a new floor, but will answer for what little No. 1 engine may be needed. No. 2 Hose Company ought to have all the room in No. 2 house for their carriage and hose, and No. 2 Engine should be placed somewhere near, if a building could be procured easy of access.

In presenting these suggestions to the voters of the town, the Engineers simply call their attention to the needs of the Fire Department to place it on a first-class footing. How much, if any, shall be accomplished this year, and how, we leave to the wisdom and good judgment of the voters of this town.

In conclusion, we thank the town for their hearty support, and bespeak their cordial co-operation in the future.

Repectfully submitted,

W. J. WALLACE,
J. F. BOYDEN,
H. F. WALKER,
Board of Engineers.

VITAL STATISTICS.

BIRTHS.

SONS.

Jan.	1.	Harold Fisher Atwood—to Horace T. and Clara A.
	3.	Patrick John McDonough—Patrick J. and Sarah M.
	8.	William Welch—William P. and Rosa M.
	19.	Arthur O. Leary—Patrick S. and Sarah A.
	19.	Alexander P. Mahoney—Michael F. and Annie M.
	26.	Henry Peterson—Christian and Jensine.
	30.	Michael John Gallagher—Patrick F. and Margaret.
Feb.	7.	Henry Winslow Marshall—Charles F. and Sarah A.
March	8.	Thomas Joseph Mahoney—Thomas F. and Mary E.
	16.	Ernest Peter Shuster—Joseph A. and M. Louise.
April	4.	William Edward McNaught—William J. and Isabella.
	7.	Francis Callahan—Dennis F. and Annie M.
	8.	Thomas Mahoney—Patrick and Margaret.
	22.	Frederick Greenwood Cottrell—Clement V. and Emely L.
May	15.	Bernard Gillooly—Bernard and Ellen.
	28.	Walter Eldon Smith—Walter and Flora.
June	8.	Frank Kivalan O'Brien—George A. and Bridget.
	23.	Jeremiah Horgan—Francis P. and Hannah J.
	24.	——— Hartshorn—John E. and Alice.
July	12.	Charles Abbott Shackley—Charles H. and Sarah J.
	16.	George Lewis Boyden—Arthur L. and Anna B.
	26.	Cyrus Churchill Thorn—William H. and Mabel.
	26.	Arthur Henry Williams—John H. and Sarah.
	27.	Lawrence Martin Kulp—Martin and Annie G.

Aug. 5. Charles Otis King—Charles W. and Roselaid.
12. Carlton Grant Robbins—Charles W. and Maryanna.
27. Joseph Calasanctius Dyer—Michael H. and Mary A.
Sept. 2. John Curran—Peter and Mary.
4. Frederick Meder Hayes—Frederick and Carrie B.
9. John Francis Galbreith—John J. and Kate.
15. James Joseph Gillin—James and Mary F.
18. Michael Curran—Martin and Margaret.
30. ——— Cronin—Dennis and Mary (removed from town).
Oct. 2. Edward Quann—Edward D. and Mary Ann.
2. Charles Ellis Bissell—Samuel and Elba M.
11. George Lewis Balduf—Julius and Louisa.
17. Patrick Costello—Thomas and Julia.
30. Henry Francis Foley—William J. and Margaret.
Nov. 2. Weslie Pond Bateman—Frank W. and E. Maria.
9. William Cornelius Gray—David F. and Mary Jane.
21. Owen Thomas Hefron—Thomas and Catherine.
21. John Coughlin—John and Julia.
29. Edgar Winthrop Metcalf—Albert W. and Mary N.
Dec. 6. Walter Joseph Welch—Patrick W. and Catherine.
12. William Kent Fulton—Lemuel B. and Alice F.
14. Edmund Bernard Pendergast — William F. and Mary E.
18. Thomas Colman Lyden—Festus and Mary.
23. Charles Christopher Ryan—Charles and Mary.

DAUGHTERS.

Jan. 19. Charlotte Irene Boullester—to George O. and Ella M.
21. Mary Elizabeth Murry—David and Margaret.
22. Elizabeth Kurtz Fetting—Emil L. and Susanna.
27. Bridget Folan—Patrick and Annie.
Feb. 10. Catherine Ellen Brady—John T. and Ellen A.
11. Hattie Marshall Fifield—Henry L. and Mary A.
22. Ethel Louise Hartshorn—Arthur N. and Fannie L.

March 2. Eva Gertrude Davenport—Ira E. and Emma.
3. Emma Keen—William and Eva.
15. Jennie Louise Cronan—John and Catherine.
15. Ruth Edna Ball—James E. and Harriet.
24. Martha Louisa Adams—Louis H. G. and Paulina.
27. Mary Elizabeth Oldham—John P. and Sarah A.
April 16. May Gertrude Frost—Truman F. and Fannie M.
19. Margaret Ellen Crowley—Michael J. and Mary D.
May 4. Catherine Agnes Cuff—William J. and Mary H.
12. Hannah E. Duncan—Christopher J. and Ellen E.
16. Mary Josephine Nagle—Francis E. and Catherine.
19. Amelia A. Blasnach—Martin and Amelia.
27. Catherine Elizabeth Kerrisey—John and Julia.
27. Helen Copeland Fisher—Edwin E. and Leoner M.
June 7. Lucy May Hunt—Frederick A. and Delania.
11. Mary Emma Rooney—Edward and Ellen T.
July 7. Avis Baston—Frederick S. and Estelle F.
11. Sarah Lyden—Martin and Bridget.
12. Mary Agnes Shedd—Charles F. and Sarah C.
17. Maud Louise Boyden—Warren A. and Mary Ann.
22. Mary Agnes Reardon—John P. and Catherine.
Aug. 4. Charlotte Elizabeth McGee—John A. and Mary.
Sept. 1. Johanna Scannell—William and Norah.
4. Maude Payson Hartshorn—James A. and Alla C.
5. Edith May Elsworth—Aaron and Eliza Ann.
6. Marjorie Davis Smith—Edson D. and Fannie G.
Oct. 1. Eleanor Coughlin—John and Annie J.
10. Blanche Elizabeth Thurlow—Winfield S. and Emma L.
20. Bessie Gardner—Lysander and Elsie E.
Nov. 11. Julia Ella Bailey—Francis E. and Lizzie F.
Dec. 2. Mary Catherine Haydon—Michael and Annie.
4. Ellen Murphy—James and Johanna.
8. Catherine Brennan—Edward and Mary Ann.
12. Annie Lyden—Peter and Mary.
31. Annie S. Welch—John J. and Mary E.

MARRIAGES.

Jan.	20.	By Rev. P. W. Macdonald, William H. Samler and Sarah Jane McKeen.
	20.	By Rev. M. J. Doody, Philip F. Galligan, of Boston, and Angeline M. Lavine, of Norwood.
	25.	By Rev. M. J. Doody, Peter Lyden and Mary Faherty.
Feb.	1.	By Rev. C. J. H. Froheoluth, Julius Marquart, of Norwood, and Elsie Feist, of Boston.
	3.	By Rev. G. I. Keirn, Herbert Tucker, of Norwood, and Nettie M. Baker, of Canton.
	14.	By N. A. Apollonis, Justice of the Peace, Simon P. Donnelly and Catherine Donavan.
	16.	By Rev. M. J. Doody, Frederick Pipping, of Dedham, and Celia J. Lavine, of Norwood.
	23.	By Rev. Ellis Mendell, Lawrence A. Ring and Abbie B. Clay, both of Boston.
March	4.	By Rev. G. I. Keirn, William J. Ellis, of Akron, Ohio, and Lillie Louisa Dean.
	7.	By Rev. D. J. Herliky, Dennis J. Hayes and Nellie McCarty.
April		By Rev. Michael J. Barry, Daglan Hogan, of Norwood, and Kate Cann, of Hyde Park.
	15.	By Rev. C. P. H. Nason, Stephen A. Libby, of Norwood, and Ella M. Cunningham, of Hollidaysburgh, Penn.
May	7.	By Rev. B. W. Barrows, Charles A. Hayes, of Norwood, and Ella J. Woodard, of Dorchester.
	12.	By Rev. M. J. Doody, John Coyne and Annie Lyden.
	23.	By Rev. Ellis Mendell, George C. Daniels, of Franklin, and Eva N. Boyden, of Norwood.
June	11.	By. Rev. B. W. Anderson, Charles Edwards, of Norwood, and Hannah Cordingly, of Boston.
	10.	By Rev. R. J. Johnson, David F. Gray and Mary Jane Sullivan.

June 27. By Rev. R. J. Johnson, John Colbert and Annie E. Sullivan.

29. By Rev. John V. Waldron, Edgar F. Roby, of Norwood, and Mary A. Seavey, of Canton.

July 11. By Rev. R. J. Johnson, Colman Foley and Bridget Thornton.

22. By Rev. B. W. Barrows, Samuel H. Swett, of Dedham, and Sarah R. Smith, of Norwood.

24. By Rev. Theron Brown, Thaddeus A. Caldwell and Jessie E. Rose, both of Walpole.

Sept. 9. By Rev. Ellis Mendell, Wales Haywood, of Bridgewater, and Phebe Maria Abbott, of Norwood.

16. By Rev. R. J. Johnson, Francis P. Flood, of Norwood, and Mary F. Sullivan, of Dedham.

Oct. 6. By Rev. Ellis Mendell, George E. Ring and Ada May Fogg.

22. By Rev. B. W. Barrows, Joseph W. Nichols and Annie H. Wiggin, both of Boston.

28. By Rev. Ellis Mendell, Oliver McLeod and Eva M. Smith.

Nov. 4. By Rev. W. H. Calkins, Charles Edwin Hall, of Norwood, and Emely L. Billings, of Newton.

8. By Rev. R. J. Johnson, Bartholomew Griffin, of Norwood, and Margaret Lawton, of Boston.

Dec. 8. By Rev. G. I. Keirn, Albert Everett and Jennie H. Fisher.

24. By Rev. G. I. Keirn, Albert G. Webb and Emma L. Royce.

24. By Rev. Ellis Mendell, Eugene H. Randlet and Edith M. Gilman.

25. By Rev. Ellis Mendell, Alfred C. Wilkins and Amy Van Buskirk.

25. By Rev. R. J. Johnson, Thomas F. Brown, of Dedham, and Margaret E. McCarthy, of Norwood.

Dec. 26. By Rev. Francis Goness, Patrick J. Morrisey and Annie A. Sheedy, of Walpole.

31. By Rev. G. I. Keirn, Henry Irving Skillings, of Westboro, and Alice C. Mountford, of Gloucester.

DEATHS.

DATE.	NAMES.	AGES.		
		Years.	Months.	Days.
1885.				
Jan. 8	Nellie Cushman	3	2	24
24	Sarah Phalan	14		
27	Fannie V. Welch	1	9	
Feb. 9	Agnes Davenport	15	1	2
Mar. 10	Joseph V. Lavine	53	11	18
April 3	Mary C. Weatherbee . . .	41		22
May 15	Hannah E. Duncan			3
16	Charles J. Legraley	54		11
21	Bertha E. Vickery	18	9	4
21	Morris Francis Rooney . .			21
26	Mary Conley	50		
June 14	Thomas Tobin			
July 4	Florence L. Smith	16	11	17
6	Mary A. Coughlin	42	7	14
26	Helen Maria Suck, (of Boston).		5	20
26	Thomas J. Mahoney . . .		4	18
26	Johanna Fitzgerald	16		
Aug. 5	Patrick John McDonough .		7	2
8	Mary Coughlin	65		
9	L. Jennette Nichols		9	24
10	Catherine M. Horgan . . .	19	2	5
14	Rachel Johnson	74	11	28
30	Francis Morse	64	4	
Sept. 12	Mrs. Milley Morse	83		
16	Thomas F. Norton	16	1	2
25	C. Robert Dexter	17	6	23
Nov. 30	Harry S. Maker	3	11	3
Dec. 7	Luke Dyer	68		
9	James Nelson	36	Supposed.	

REPORT OF CEMETERY COMMISSIONERS.

The financial statement of the Commissioners accompanies this report. It shows the records of lots sold, and all expenditures. No appropriation was voted by the town this year, and consequently the fund on hand is now reduced to $368.57. We recommend an appropriation the coming year for necessary repairs upon the Hillside avenue. The cemetery grounds have been entrusted to the care of W. Allen Talbot, of our committee, who has devoted to it personal and faithful attention. The walks and avenues have been re-gravelled, some new public lots have been dug over, and other improvements made to render the cemetery attractive to the friends of the departed.

With the limited funds at disposal the work is believed to have been faithfully done.

FRANCIS O. WINSLOW,
ALBERT G. WEBB,
W. ALLEN TALBOT,
} *Commissioners.*

DR. HIGHLAND CEMETERY COMMISSIONERS,

DR.

1885.	CASH RECEIVED FROM	
April 20.	Henry N. Fales, Lot No. 169,	$15 00
	4 posts and setting,	6 00
April 24.	Moses W. Power, Lot No. 41,	25 00
	4 posts and setting,	6 00
July 11.	Sarah LaGraley, Lot No. 253,	10 00
	4 posts and setting,	6 00
Aug. 25.	F. B. Cushman, Lot No. 23,	40 00
	4 posts and setting,	6 00
Sept. 26.	George and Cordelia Kingsbury, Lot No. 252,	10 00
	4 posts and setting,	6 00
Nov. 14.	Amanda E. Boyden, Lot No. 53,	40 00
	4 posts and setting,	6 00
Nov. 25.	John D. and Wallis Smith, Lot No. 218,	15 00
	4 posts and setting,	6 00
Nov. 27.	Robert Vickery, Lot No. 219,	15 00
	4 posts and setting,	6 00
Dec. 21.	Frank W. Ellis, Lot. No. 55,	25 00
	4 posts and setting,	5 00
		$248 00

in account with the TOWN OF NORWOOD. CR.

CR.

1885.	CASH PAID		
July 11.	L. W. Bigelow, Town Treasurer,		$68 00
Nov. 23.	" " " "		108 00
1886.			
Jan. 30.	L. W. Bigelow, Town Treasurer,		72 00
			$248 00

ORDERS DRAWN ON L. W. BIGELOW, Town Treasurer.

1885.		In favor of	
Aug.	7.	C. B. Dexter, setting posts,	$8 00
	7.	A. G. Webb, cash paid C. Sullivan for labor,	31 80
	8.	Dennis Higgins, for labor,	25 00
Sept.	23.	" " "	41 50
Oct.	22.	Cornelius Sullivan, for labor,	15 40
Nov.	7.	Dennis Higgins, for labor,	55 13
	7.	William Coughlin, for labor,	30 94
	23.	Thomas Kerrisey, for labor,	15 30
1886.			
Jan.	30.	C. B. Dexter, setting posts,	2 00
	30.	W. Allen Talbot, plants and labor,	155 86
	30.	" " cash paid for labor,	27 52
	30.	Francis Tinker, recording deeds,	2 50
			$410 95

REPORT OF PUBLIC LIBRARY.

Dr.

To books purchased	$347 15
Rebinding books	21 00
Printing supplement	15 00
Labor on "	4 00
Printing labels	2 25
Express	4 00
Stove fixing	1 50
Fuel	5 63
Salary	150 00
Rent	75 00
Insurance paid last year	34 50
Incidental expenses	10 38
	$670 41
Balance in treasury	7 70
	$678 11

Cr.

By town appropriation	$400 00
Dog license	253 03
Chickering fund	8 64
Fines collected	16 44
	$678 11

Books issued, 19,000.
No books lost.

J. W. TALBOT, *Librarian.*

SCHOOL COMMITTEE'S REPORT.

REPORT OF THE SCHOOL COMMITTEE FOR 1885-86.

The sum asked for and voted by the town at the last March meeting for the support of schools was $8,400. The bills already drawn and paid, amount to $8,410 45, with something still due Mr. Atwood and two of the lady teachers. The overdraught was caused by necessary, but unanticipated expenditures, in the nature of permanent improvements. The additional school in the East building has increased the expenses for books, fuel and incidentals.

REPAIRS.

The Everett building is old, and was much out of repair. The heating apparatus, from long use and that general style of treatment which school property is too apt to receive, was in such condition as to require $146 51 to render it safe and efficient. At the same time the recitation rooms were more completely ventilated, the stairs rebuilt and repaired, the hall floors relaid in part, and the out-buildings repaired, involving a carpenter's bill of $72 66. In addition to this, the cost of the introduction of water was $267 75, a sum much larger than the committee anticipated. But the work appears to be well done, and the water is a great convenience, affording much satisfaction and comfort to the teachers and pupils.

In the Balch school house a new furnace was needed, as the old one, having served nineteen years, was past further repair. The new furnace is of wrought iron, of the Dr. Pierce pattern, a good heater, and does as nearly what we desire, as any furnace can be expected to do in a building so exposed to the winter winds as that school house is. The work was done by Maker & Johnson of this town, in a manner satisfactory to the committee. The cost of the furnace with two additional flues and registers carrying the heat to the rear part of the rooms, was $212. A new picket fence was placed on two sides of the school yard, at an expense of about $125, including posts, painting and carpenters' bills, the items of which will be found in the selectmen's report.

At the East school the furnace was found inadequate to the heating of two rooms. The difficulty was obviated at an expense to the committee of $10 50.

At the North school no unusual repairs have been called for. The committee placed a light board fence costing but a few dollars, in the rear of the building, for the purpose of separating the sexes in that part of the yard. It serves the purpose intended, and the teachers regard it as a help to order and morality. Near the beginning of the present term the house came near taking fire from the overheating of the chimney near a cross-beam in the stair-way. By the promptness of Miss Jennie P. Baker, the primary teacher, and the vigorous alacrity of the janitor, Mr. Jarvis Fairbanks, the incipient blaze was extinguished before it had gotten much force. It cost $28 to make the repairs and put the building in a condition of safety from any similar cause, which bill Mr. T. E. Clary, agent for the insurance company, promptly and willingly paid.

SCHOOL BOOKS.

The expenditure for text books, stationery, etc., has been about $100 in excess of the estimate, owing to the new school and the large accessions of children to all the schools, and the fact that those who left took away their own books, making a deficiency to be supplied by the town. We hope to come within the appropriation for that purpose the ensuing year. The books have been carefully used, and only in one instance has any serious damage been reported.

CHANGES OF TEACHERS.

Miss Mary S. Phillips, the assistant in the first department, resigned at the beginning of the year; Miss Fanny R. Waterman was engaged to fill the vacancy. Miss Emily V. White left the third department and Miss Helen Chandler was engaged to teach the class. Miss Louisa Rhodes and Miss A. E. Park left early in September to fill more lucrative situations in Dedham; Miss Mary A. Allen and Miss Burnham are conducting these departments at the present time. Afterwards two more of our teachers were invited by the Dedham Superintendent to leave us without notice. The committee felt that they must make both a moral and a pecuniary effort to prevent our schools from becoming training schools for Dedham. The two teachers were retained, and said superintendent having left Dedham, we feel comparatively safe for the present. Our teachers are doing good service, they are competent for their work, and take a professional pride in keeping up with the times; and while we do not pay as

high salaries as some larger and richer towns, we pay more than the average of towns in the state. School teaching is a difficult and laborious profession, and should be compensated in proportion to its importance, and the difficulty of obtaining the requisite talent.

CONDITION OF THE SCHOOLS.

Our schools are in as good a condition as could be expected under existing circumstances, though by no means up to our ideal standard. The second and third departments have suffered some deterioration by changes of teachers, but they are fast recovering under the present incumbents, Misses Chandler and Burnham. Any hindrance in one room retards all above it.

In the first department, so long as high and grammar studies are pursued together, both must suffer. We cannot expect the best of either one or the other. The town made a very serious mistake in placing them together,—a mistake that should be rectified by establishing a separate High school in a building by itself as soon as possible. The committee and teachers can command no complete remedy until the town shall see fit to act, and give the older scholars a first-class Grammar, and a separate High school. There is pressing need of additional school room, and it is only a question of very short time before new school buildings must be erected. There are more pupils than seats in the three buildings in the center. With ninety births a year, where are the coming five-year-olds to be placed? Two primary school rooms and a building for the High school would give a temporary relief, and complete the school system of the town. This will cost money, but education is the foundation of wealth,

of order, of true manhood. It must be had, cost what it will, and the citizens ought to move immediately to provide for the present and future accommodation of their children.

In the lower grades the pressure of numbers does not so materially interfere with excellent work on the part of the teachers. In the higher departments the teaching may be just as good, but with older pupils more personal force and exertion are necessary to render it effective. Still, if scholars were hungry for knowledge, and eager to learn, taking any pains to remember what they are taught, there would be no complaints made concerning the results of our school work. The two most prolific sources of hindrance to genuine mental progress, are indifference and indolence on the part of the pupil, and meddling fussiness on the part of certain parents. There are good teachers, good text books, good courses of study, but these, to a large number, are neutralized by the above two obstacles. They are the cause of truancy, waste of time, and false accusation. The boy who hates to go to school, and consequently learns nothing, throws all the blame on his teacher, to screen himself. He can learn if he will, and no pupil need suffer for lack of faithful, systematic instruction. Self-determination, backed up with a little parental urgency, would yield astonishing results to some who now notice the schools only to berate them. While we have not every desirable facility, still every well-disposed scholar can acquire arithmetic, geography, grammar, reading, writing and spelling in our schools as well as in any others that may be named. The poor man need not send out of town unless he chooses to do so. He only needs to put a little more vim and application into his boy or girl to be thoroughly satisfied with home results. There are advantages, of course, in a small school

or class, chiefly that it gives the teacher a greater personal influence over each mind. But the public schools do not profess to furnish the *luxuries* of education ; neither can they provide capacity of mind nor the disposition to learn. They do not fail, however, to provide thirty-eight weeks of good substantial education to each of the five hundred school children in the town who see fit to avail themselves of the privilege.

CONCLUSION.

Our report lays nothing new before the citizens, but contains the doings of your committee and a presentation of the present condition and prospects, and the future needs of the public schools. No more important subject can claim your attention. We know you feel a deep interest in this matter. We do not distrust your wisdom nor your willingness to deal generously and wisely by this public trust.

George Hill,
Theron Brown,
Joshua A. Crocker.

The committee have drawn up and had printed a set of rules and regulations and course of study to be observed by school officers and pupils, which they believe will serve a useful purpose and meet with your approval. They are found in the following pages.

RULES RELATING TO THE BOARD.

ORGANIZATION.

1.—The committee shall meet for organization within one week after being notified of their election.

2.—Stated meetings of the Board shall be held monthly, and special meetings may be called by the chairman whenever he deems that the interests of the school demand them.

3.—The annual election of teachers shall take place in June, after the close of the third term, and all teachers may consider themselves re-elected unless notified to the contrary.

4.—All school bills shall be approved by the committee in a manner satisfactory to the selectmen.

5.—The committee shall visit the schools once a month to satisfy themselves of their condition, and of the fitness and fidelty of the teachers for their respective positions.

6.—The committee shall have charge of all school property, keep it in good repair, and deliver the same to their successors in office.

7.—They shall make to the town an annual report of the condition of the schools, and of the school property belonging to the town.

REGULATIONS RELATING TO THE PUBLIC SCHOOLS.

1.—The school year shall consist of thirty-eight weeks, divided into three terms, so as to allow at the least two weeks vacation between the fall and winter and the winter and spring terms, the first term commencing on the first Monday in September, or the Monday nearest the first of September.

2.—SCHOOL HOURS. All the schools throughout the year shall begin the morning session at 9 o'clock A. M., and close at 12 M., with a recess of fifteen minutes in the middle of the session. In the afternoon, during the winter months, the session shall begin at 1.45 P. M., and close at 3.45 P. M., with no recess, with the exception of of the primary departments. During the summer months the afternoon sessions shall begin at 2 o'clock P. M., and close at 4.30 P. M., with no recess, except to the primary classes. On very rainy or stormy days only one session will be required, from 9 o'clock A. M., to 1 o'clock P. M.

3.—TEACHERS' ATTENDANCE. Each school-room shall be opened and the teacher present fifteen minutes before the commencement of the session.

4.—The morning session shall be opened with reading from the Scriptures without note or comment, and the use of the Lord's Prayer, and singing if practicable may be added.

5.—All teachers must keep a written order of exercises to be seen by the committee and others, and to be left in the desk when they leave the school.

6.—School Registers, &c. The teachers are required to keep the registers on the prescribed plan,—marking the absences and tardiness *daily*, putting down the names of all visitors, the visits of the members of the committee, with a list of the regular and special text books in their rooms. They are also required by law to fill out and hand to the secretary the registers of their schools before they draw their last month's pay. This rule will be rigidly enforced.

7.—Teachers shall give careful attention to the ventilation and temperature of the school-rooms, changing the air frequently. They shall also see that the pupils do not sit or stand in cramped and awkward positions, which tend to produce deformity and ill-health.

8.—It is desirable that the teachers should send monthly reports to the parents concerning the deportment and progress of each pupil, and should hold frequent interviews with the parents concerning the school habits of their children.

9.—Pupils must not be sent from one room or school to another without an order from the school committee. Pupils moving into town must report to some member of the committee before they can be received into school.

10.—All children living in the town and upwards of five years of age, and otherwise qualified, shall be entitled to attend the public schools.

11.—The teachers shall require written excuses from parents for tardiness and absence. Any pupil absent for more than ten days consecutively shall present a note of permission from some member of the committee before the teacher shall receive him again.

12.—Any pupil who refuses to submit to proper discipline, or uses abusive and improper language to a teacher, may be sent home, and must report in person to the chairman of the committee before he can be readmitted to the school.

13.—Every pupil must come to school cleanly in person and dress, and observe tidy habits in and about the school-room and yard.

14.—Teachers shall report the names and residences of truants, and the names and residences of their parents or guardians to the truant officers.

15.—Books and Studies Authorized. The books used and studies pursued in all the public schools shall be such as are authorized by the committee, and the teachers shall not permit any books, tracts or other publications to be distributed or read in the school-room.

CARE OF THE SCHOOL PREMISES.

16.—Teachers are to prescribe rules to be observed in the yards and about the buildings, and to see that no want of decorum or lack of neatness is indulged by the pupils. And any neglect on the part of the janitor, or of any needed repairs, shall be reported to the school committee.

17.—It shall be the duty of the janitors to have the school-rooms properly warmed, consulting the thermometers in the several rooms to see that they are up to 68° or 70°, to take good care of the furnaces and boilers, to keep the cellars neat and properly ventilated, to see that all the premises are kept in a good sanitary condition, to look after the water pipes, and see that the buildings are properly secured at night. Also to clear paths to the out buildings in snowy weather.

18.—No pedlers, showmen, book agents, or advertisers shall be permitted by the teachers to enter the school-rooms or yards to ply their business, or in anywise engage the attention of the pupils.

19.—Injury to School Property. Pupils who injure any school property shall be held responsible for the damage done. Any pupil or person who shall use or write any profane or indecent language, or draw any obscene pictures or characters on any part of the school buildings or fences, or any one who shall be suspected of the same or shall be known or suspected of committing any nuisance about the premises, shall be forthwith reported to the school committee by the principal of the school.

20.—School books must be accounted for to the secretary of the school committee by the teacher at the end of each term. In case of loss or damage the book must be replaced at once by the pupil. Marking and defacing the books must be regarded as a serious offence.

21.—Examinations, &c. Teachers shall require written examinations in all the schools above the primary grades near the close of each term. Promotions will be governed by the record of these examinations, and no pupil who has not an average of at least seventy per cent. can expect promotion.

22.—Promotions shall take place at the commencement of the school year, and at no other time, except upon the recommendation of the teacher and the approval of the committee.

23.—Teachers may, by permission of the local committee, visit other schools from time to time, to observe modes of discipline and improved methods of teaching

24.—Corporal punishment may be used in extreme cases, but with judicious care, and only after milder measures have been exhausted.

25.—The teachers in all grades of the schools shall give each week one oral lesson of not more than thirty minutes' duration, nor less than fifteen, on the physiological effects of alcohol on the human system, using as a text book the author prescribed by the school board.

26.—Teachers contemplating leaving their situation are required to give at least two weeks' notice to the chairman or secretary of the committee.

27.—Teachers are not expected to carry any work into the school-room except that pertaining to the business of teaching.

28.—All teachers in the public schools are required to make themselves familiar with these rules and regulations, to keep a copy of the same upon their desks, to acquaint the pupils with their contents, and to see them faithfully observed.

Mass. General Statutes, Chap. 38, *Sec.* 10.

"It shall be the duty of the president, professors and tutors of the University at Cambridge, and of the several colleges, of all preceptors and teachers of academies, and of all other instructors of youth, to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction, the principles of piety and justice, and a sacred regard to truth; love of their country, humanity and universal benevolence; sobriety, industry and frugality; chastity, moderation and temperance; and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded; and it shall be the duty of such instructors to endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above mentioned virtues,

to preserve and perfect a republican constitution and secure the blessings of liberty as well as to promote their future happiness; and also to point out to them the evil tendency of the opposite vices."

GENERAL DIRECTIONS.

The following general directions are so pertinent and useful that we venture to copy them from the rules and regulations of a neighboring town, and to commend them to the careful perusal of our own teachers.

"Good behavior" in the public schools is enjoined by the law of the State, as well as by common sense. The efficiency of a teacher is largely dependent on his success in securing this; and such success will result only from a constant exhibition on his part of the propriety of speech and demeanor, and that uniform courtesy and consideration for others, which he should demand and obtain from his pupils. He is their guardian for a considerable part of the time allowed to personal guardianship, and a just appreciation of the trust demands his untiring efforts to impress his character upon his scholars. This, with the ready sympathy which he should feel for them in their many difficulties, failures, or successes, will, in nearly all cases, accomplish the desired result. The sterner lesson of the rod will rarely be necessary.

The *sanitary condition* of the school room, *exercise*, and *posture*, must engage the teacher's constant and intelligent attention. A reasonable care will easily prevent the air from becoming dangerously hot, cold or vitiated. Considerable changes in the temperature should never be made suddenly, but should be gradually effected by judicious

use of the ventilators. A decided draught through the room should not be allowed while scholars are seated or standing still, nor should the air from an open window beat down on the heads or backs of children at their desks. There should be simple physical exercises of two or three minutes' duration, twice at least in each session in the lower classes, and once in the others. A few well arranged exercises should be taught, so that the pupils will be able to practice them with precision and uniformity, knowing just what to do without imitating the teacher. All sudden or jerking motions should be avoided. Sitting, counting aloud or singing, should seldom, if ever, be allowed while exercising.

In *oral instruction* every lesson should have a point, and, with that end in view, it is to be associated with the subjects of study. The amount of information does not depend on what the teacher gives, but on what the scholar acquires. Consequently "the oral" should not consist of desultory conversations on each passing theme, but should be chiefly employed to explain and enlarge upon, in an easy and familiar manner, that which the text books contain. This method will tend to a thorough *assimilation* of the information given, and demonstrate that it is better to learn a *few* things well, than *many* things ill. The pressing need of more careful and earnest study makes it unwise to intrude on the time of study by diffuse explanations; but on every study assigned, the teacher should give timely words and suggestions.

COURSE OF STUDY.

In the course of study as laid out in the following pages, and which is open to every pupil, the committee desire to give special emphasis to the practical English branches, such as reading, spelling, writing, arithmetic, geography, grammar, bookkeeping and drawing. To acquire some knowledge of the above is what our schools are for, and no pupil who attends them six, seven or eight years ought to go out into the world with an intellectual outfit insufficient for ordinary business. The prescribed course is logically systematic, and the teachers are competent to carry it out; and if the scholars do their part, they need not leave school without being tolerably equipped for the duties and business of life.

First Year (Primary).

Object and Language Lessons.—Simple conversational exercises on the form, color, and prominent qualities of things; the human body; the five senses.

Reading and Spelling.—Word method; first the idea, then the sound symbol, then the written symbol; use blackboards, objects, pictures, charts, and primer.

Lessons in Number.—Teach facts in numbers as far as 10.

Calisthenic Exercises, writing, drawing, and music daily; occasional exercises in committing and reciting poetry; lessons on the effects of alcohol on the human system, and modelling in clay once per week.

Second Year (Primary).

Object and Language Lessons.—Ideas of size and distance by simple measurement; colors; qualities of objects; habits, traits, and structure of animals; pupils to make sentences and express them in writing.

Reading and Spelling.—First Reader grade. Oral and written spelling of words whose meanings have been taught.

Number.—Facts in numbers as far as 50, including Arabic and Roman expression of them; counting as far as 100.

Calisthenic Exercises, writing, drawing and music daily; occasional exercises in committing and reciting poetry; weekly lessons on the effects of alcohol on the human system; modelling in clay.

Third Year (Primary).

Object and Language Lessons.—Tints and shades of color; less noticeable qualities of objects; simple hygienic rules; vegetable, animal and mineral products; facts about common things.

Reading and Spelling.—Second Reader grade.

Numbers.—All facts in numbers as far as 144; addition, subtraction, multiplication, and division of numbers as far as 1000, divisors not to exceed 10.

Calisthenics, writing, and music daily; drawing three times per week; committing and reciting poetry; modelling in clay, and lessons on the effects of alcohol on the human system, weekly.

Fourth Year (Grammar).

Oral Lessons in geography, history, biography and elementary science.

Language Lessons.

Reading and Spelling.—Third Reader grade.

Arithmetic.—Exercises in reading, writing, and combining numbers; as far as page 38 in "Brief Course."

Primary Geography commenced.

Writing.—Copy book No. 1.

Drawing.—Book No. 3.

Calisthenics and Music daily; lessons in effects of alcohol on the human system, and modelling in clay once per week; rhetorical exercises occasionally.

Fifth Year.

Oral Lessons in geography, history, biography, and elementary science.

Language Lessons.

Reading and Spelling.—Third Reader grade.

Arithmetic.—Variety of exercises in reading, writing and combining numbers; as far as page 103 in "Brief Course."

Primary Geography completed.

Writing.—Copy book No. 2.

Drawing.—Book No. 5.

Music and Calisthenics daily; modelling in clay, and lessons in the effects of alcohol on the human system once per week. Rhetorical exercises occasionally.

Sixth Year.

Oral Lessons in history, biography, elementary science, and current facts. Elementary lessons in English as far as page 84.

Reading.—Fourth Reader grade.

Spelling.—Words selected from reader, pronouncing speller, and other sources.

Arithmetic.—"The Complete Arithmetic," as far as page 95, and frequent exercises in mental arithmetic.

Common School Geography as far as page 70.

Compositions and Declamations.

Drawing.—Book No. 6.

Writing.—Copy book No. 3.

Music and Calisthenics daily.

Seventh Year.

Oral Lessons; government, (town and county); Elementary science; current facts.

Language Lessons as far as page 85.

Reading.—Fourth Reader grade.

Spelling.—Words selected from speller and from other sources.

Arithmetic.—"The Complete Arithmetic" as far as page 167; frequent exercises in "Colburn's Mental Arithmetic."

Common School Geography as far as page 118.

United States History through "French and Indian War."

Drawing.—Book No. 7.

Writing.—Copy book No. 4.

Music and Calisthenics; declamations, compositions and letter writing.

Eighth Year.

Oral Lessons; government, (state and nation); current facts; physiology and hygiene.

Language Lessons as far as page 171.

Reading.—Fifth Reader.

Spelling.—From speller or from other sources daily.

Arithmetic.—"The Complete Arithmetic" as far as page 203, and exercises in "Colburn's Mental Arithmetic."

Common School Geography completed.

History of United States completed.

Drawing.—Book No. 8.

Writing.—Copy book No. 5.

Music and Calisthenic exercises; declamations, compositions, and letter writing.

Ninth Year.

HIGH SCHOOL CLASS.

Algebra begun.
Latin, Grammar and Reading.
English Language and Composition work.
Reading and Spelling.
Declamations and Recitations.
Music.
Drawing.—Book No. 9.
Writing.—Copy book No. 6.

GRAMMAR SCHOOL CLASS.

Arithmetic reviewed.
Geography reviewed.
English Language and Composition work.
Reading and Spelling.
Literature.
Declamations and Recitations.
Music and Calisthenic exercises.
Drawing.—Book No. 9.
Writing.—Copy book No. 6.

Tenth Year.

Algebra completed.
Physiology.
American Literature.
Cæsar.
Compositions, Declamations and Recitations.
Drawing.—Book No. 10.
Music.

Eleventh Year.

Virgil.
Geometry.
French.
English Literature.
Physics.
Review studies of previous years.
Declamations, Recitations and Compositions.
Drawing.—Book No. 11.
Music.

TOWN MEETING WARRANT.

Commonwealth of Massachusetts.

NORFOLK, ss.

To either Constable of the Town of Norwood, in said County,
GREETING:

In the name of the Commonwealth of Massachusetts you are hereby required to notify and warn the inhabitants of the Town of Norwood qualified to vote in elections and town affairs, to meet in Village Hall, in said town, on Monday, the first day of March next, at one o'clock in the afternoon, then and there to act on the following articles, viz: —

ARTICLE 1. To choose a Moderator to preside in said meeting.

ARTICLE 2. To choose all necessary Town Officers for the year ensuing.

ARTICLE 3. Shall licenses be granted for the sale of intoxicating liquors in this Town? The check-list shall be used and the vote shall be by separate ballot, and ballots shall be Yes or No in answer to the question.

ARTICLE 4. To hear and act on the report of the Auditors on the Selectmen's, Treasurer's, Collector's and Water Commissioner's accounts.

ARTICLE 5. To see if the Town will accept of the list of Jurors as prepared by the Selectmen and posted as required by law.

Article 6. To see if the Town will authorize the Collector of Taxes to use the same means a Town Treasurer may use when acting as Collector.

Article 7. To see if the Town will fix the time within which taxes assessed therein shall be paid, and authorize the Collector to charge interest at the rate of seven per cent., or less, a year, on all taxes remaining unpaid at that time.

Article 8. To see what compensation the Town will allow for the collection of taxes.

Article 9. To see if the Town will vote to authorize the Treasurer, with the approval of the Selectmen, to borrow money in anticipation of taxes of the ensuing year, and to issue notes of the Town therefor, and the debts incurred under the authority of this vote are hereby made payable from said taxes.

Article 10. To hear and act on the reports of Committees.

Article 11. To see what sum of money the Town will raise and appropriate for the Repairs of Highways, and agree upon the method of repairing the same.

Article 12. To see what action the Town will take in regard to appointing Road Surveyors for different sections of the Town.

Article 13. To see what sum of money the Town will raise and appropriate for the Support of Schools the ensuing year.

Article 14. To see what sum of money the Town will raise and appropriate for the Teaching of Music in the public schools.

Article 15. To see what sum of money the Town will raise and appropriate for the support of the organization of the Fire Department the ensuing year.

Article 16. To see what disposition the Town will make of the money received for dog licenses.

Article 17. To see if the Town will raise and appropriate money for the support of the Public Library.

Article 18. To raise such sums of money as may be necessary to defray town charges not otherwise provided for the current year.

Article 19. To see what action the Town will take in regard to setting off a part of Highland Cemetery for the use of the Catholic population of the town, or to the purchase of more land for that purpose and to raise and appropriate money for the same.

Article 20. To see if the Town will vote to pay two dollars per day to the laborers on the Highways, and that none but citizens of the Town be employed.

Article 21. To see if the Town will accept of a street as laid out by the Selectmen, from Railroad avenue, near the house of Thomas Nevil, running south to a point near the house of William Cuff, and raise and appropriate money to build the same.

Article 22. To see what action the Town will take in regard to the reorganization of the Fire Department.

Article 23. To see if the Town will raise and appropriate the sum of one thousand dollars for the purchase of hose for the Fire Department.

Article 24. To see what sum of money the Town will raise and appropriate for the prosecution of illegal sales of liquor, and agree on the manner of expending the same.

Article 25. To see if the Town will raise and appropriate the sum of one hundred and fifty dollars for the use of George K. Bird Post No. 169, Grand Army of the Republic, for the purpose of decorating soldiers' graves, etc., on Memorial Day.

And you are directed to serve this warrant, by posting up attested copies at the Post Office and in each of the several Churches and Railroad Stations in said Norwood, seven days at least before the time of said meeting.

Hereof fail not, and make due return of this warrant, with your doings thereon, to the Town Clerk, on or before the time and day of said meetlng.

Given under our hands, at Norwood, this eighteenth day of February, A. D. 1886.

GEO. H. MORSE,
FRANK A. FALES,
J. E. EVERETT,
Selectmen of Norwood.

A true copy. Attest:

.....

Constable of Norwood.

FIRST ANNUAL REPORT

OF THE

BOARD OF

WATER COMMISSIONERS

OF THE

TOWN OF NORWOOD,

Including Report of the

ENGINEER.

For the Year Ending January 27, 1886.

BOSTON:
PRESS OF T. O. METCALF & CO., 48 OLIVER STREET.
1886.

FIRST ANNUAL REPORT

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For the Year Ending January 27, 1886.

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Report.

The Water Commissioners herewith present their first annual report, containing an account of the work done, and money expended under the vote of the town, authorizing the construction of public waterworks.

It is hardly necessary to give the history of the earlier steps of the enterprise, as the facts are of such recent occurrence as to be familiar to every citizen.

A copy of the Act passed by the legislature, in answer to the petition presented for the same, is appended to this report, and reference to it will show the authority under which the town has undertaken the enterprise of supplying its citizens with a modern water supply.

This Act was legally accepted by the town, in a meeting held for the purpose, March 30, 1885, by a vote of 333 to 101. At this meeting the town also voted to take the water of Buckmaster Pond, issue bonds to the amount of $75,000, and chose J. Edward Everett, George H. Morrill, and Francis M. Baker, Commissioners, for three, two and one years, respectively, from the next annual town meeting. Your Commissioners duly met and organized, with the choice of J. E. Everett, chairman, secretary and treasurer, and instructed him to have a general oversight and supervision of the work of construction.

Percy M. Blake, Civil Engineer, of Hyde Park, Mass., was engaged as engineer, at a salary of $2800 until November 1, 1885, and $250 a month after that time, he to take full charge of the works, furnish specifications for contracts, engineering assistants and inspectors, the Commissioners being unfamiliar with the work of construction, and not having time to devote to it. The first proposals issued were for furnishing pipe and laying the same. Eleven bids were received, and the contract was awarded to J. T. Langford, of Newton, Mass., for the sum of $44,150, he to furnish gates, hydrants, etc., also to

remove 300 cubic yards of rock, any amount above that to be paid for at the rate of $4.00 per cubic yard. Proposals for the necessary pumping plant were received May 5th from the following parties:

Henry R. Worthington	$4250 00
Deane Steam Pump Co.	4925 00
" " " " full compound, .	5525 00
Knowles Steam Pump Co., duplex, ...	6304 00
" " " " single.	6029 00
Davidson Steam Pump Co., single engine,	5350 00
Holly Manufacturing Co.	8000 00
" " " compound, . .	8500 00

The Commissioners wishing to see the several pumps in operation before deciding, visited North Attleboro', Watertown and Dedham. Being pleased with the workings of the Davidson pump at North Attleboro, the contract was awarded to the Davidson Steam Pump Co., for $5,350.00.

Bids for reservoir, based upon estimated quantities of work, were received June 16th, from

Thomas T. Welch . . .	Dedham, ...	$ 9542 00
Maney Brothers . . .	Boston, ...	9053 80
John H. Dawe	Somerville, incomplete bid.	
Mitchell & Harris . . .	Boston, ...	6707 00
J. H. Leavitt	"	9613 00
Perkins & Willcutt . .	"	11,320 10
Conrad Juul	Danvers, ...	8157 00

The contract was given to Mitchell & Harris, they being the lowest bidders, the Commissioners agreeing, as provided in the specifications, to furnish paving blocks, sand and gravel for the concrete required.

On the same date proposals were received for building the pumping station, at West Dedham, from

A. T. Briggs	Taunton, ...	$4855 00
L. D. Willcutt . . .	Dedham, ...	4286 00
Wm. Gillooly & Son .	Norwood, ...	3625 00
Geo. H. Peare . . .	Hyde Park, ...	3573 60
F. A. Fales	Norwood, ...	3550 00

F. A. Fales, being the lowest bidder, was awarded the contract for $3550.00.

The contract for laying service pipes from the street mains to the houses, was given to O. N. Bingham, of Dedham.

In the settlements for land damage we cannot report as favorably as we would like. The pumping station lot at the pond was purchased from Samuel F. Allen, for the sum of $300.00, which we do not consider an unreasonable price; the right to lay pipes through land of same was settled for $65.00, which sum also included all claims for damage incident to, or resulting from, taking and carrying water through his property. Settlement with Mr. Noyes has been delayed. The terms have once been agreed upon, but the papers are still in the hands of his attorney awaiting his examination. We hope to be able to settle this claim without legal complications.

Rights to lay pipes through land of Francis Cheney and Lewis Thompson, were obtained by paying $50.00 to each party.

The site for reservoir, and approach thereto, required about five acres of land, of which, two acres were purchased of F. M. Baker, for $100.00. For the three remaining acres, including one required for roadway, the Commissioners offered $500.00, that being about four times the assessors' valuation, and in their judgment a fair and full value, but the interested parties demanding $1,500.00, the claim is still unsettled. A small piece of land required to widen Winter street, containing one-tenth of an acre, was bought of Lewis Guild for $25.00.

Bonds to the amount of $75,000.00 were issued, as voted by the town, bearing interest from August 1st, 1885, at four per cent. They were sold to Blake Brothers & Co., Boston, for $79,237.50, bringing a premium of $5\frac{65}{100}$ per cent. of their face value. These bonds were issued in series, payable as follows:

Series	1st	$10,000 00	payable in	5	years	due	1890
"	2nd	"	"	" 10	"	"	1895
"	3rd	"	"	" 15	"	"	1900
"	4th	"	"	" 20	"	"	1905
"	5th	"	"	" 25	"	"	1910
"	6th	25,000 00	"	" 30	"	"	1915

The funds obtained from this sale were deposited with the New England Trust Co., and the first interest payment, due Feb. 1st, 1886, has been made. The $2000.00 appropriated by the town for the purpose, has been invested as a sinking fund, $1000.00 being placed in the Dedham Savings Bank, and $1000.00 in the Suffolk Savings Bank, Boston. Money was needed for use before the funds for the sale of the bonds became available, but the Commissioners, deeming it unwise to issue these bonds before August 1st, personally advanced between $4000.00 and $5000.00.

In regard to the construction of the works. Owing to delay in receiving the pipes, and the large quantity of rock encountered, the progress of the pipe laying was retarded, and the contractor was unable to complete the entire work at the time anticipated. Winter closing in, it was deemed advisable to suspend work on Nahatan, Maple and Howard streets until spring, when Mr. Langford will complete his contract, and put in any extensions desired, on the same terms. Mr. Langford's work has thus far proved satisfactory, only one leak of any amount having been discovered, and that was caused by a defective pipe and immediately remedied. The settlement of account with Mr. Langford up to the present date, is as shown in the Engineer's certificate, a full copy of which is here given.

ENGINEER'S CERTIFICATE.

Cast-Iron Pipe and Special castings received:

12 inch	163.941 tons.
10 "	274.703 "
8 "	273.834 "
6 "	228.256 "
Special castings	23.405 "

12 inch gates received, 6	set 5
10 " " " 8	" 8
8 " " " 15	" 12
6 " " " 32	" 32
Fire hydrants received, 64	set 64

12 inch pipe laid	4055.$\frac{5}{10}$	feet.
10 " " "	9152.$\frac{3}{10}$	"
8 " " "	13,243.$\frac{2}{10}$	"
6 " " "	12,069.$\frac{4}{10}$	"

Rock excavated by blasting	1677.$\frac{664}{1000}$	cu. yards.
Earth " below grade	137.$\frac{72}{100}$	" "

The above material and labor have been furnished by John T. Langford, under his contract with the town of Norwood, dated June 2nd, 1885.

PERCY M. BLAKE, *Engineer Norwood Water Works.*

Reservoir :

Work on the Reservoir progressed with but little delay and was finished very nearly within the time specified in the contract. The site chosen was a favorable one, and the nature of the soil proved to be very well adapted for the purpose ; being a clayey gravel, impervious to water, the expense of an especially prepared puddle lining was saved. Suitable gravel for concrete and bedding paving stones not being found in the vicinity, some additional expense was incurred in carting it from the town pit. The paving stones were furnished by the Hurricane Granite Co., Rockland, Me. The work of the contractors was done in a very thorough manner, and was satisfactory to both Commissioners and Engineer. Expense incurred in building Reservoir is as follows :

Messrs. Mitchell & Harris, labor as per contract,	$6136 48
Paving stone	1729 83
Other expenses	1606 61
Total	$9472 92

The cost of extension of Winter street to site of Reservoir was $794.10. Part of this bill properly belongs to Reservoir account, as the loam taken from the road was used in grading around the Reservoir.

The Pumping Station was built, according to contract, by F. A. Fales, at a cost of $3550.00 ; other expenditures necessary to complete and furnish the same, amount to $1213.34. Total $4763.34.

Pumping Plant:

The pump, although a good one, fails to come up to the standard, as guaranteed by the makers, in point of economy. Another test will be required before further payment will be made. The Davidson Company have already received $4143.22. The contract price was $5350.00, extra for connecting pipe, etc., $88.98, leaving a balance of $1295.76 unpaid. Expense of suction pipe and crib, $502.01; Coal sheds, $716.00; Engine and Boiler foundations, $562.70.

Office Building:

The Commissioners, requiring an office and a place for keeping accounts, tools and service pipes, put up a small building at an expense of $501.71; Safe, stove, furniture, $210.50, making a total cost of $712.31.

As the Pumping Station approached completion, the services of an engineer were required, and the Commissioners engaged George A. P. Bucknam, at a salary of $1000.00 a year. The duties at the present time are not arduous, but a proper care of the machinery requires the daily attention of a careful and competent man. He will not only take care of the engine, but will attend to all the mechanical duties connected with the plant, and the putting in such service pipes as may be required in the future.

The Commissioners finding the appropriation was becoming exhausted, and receiving no applications for water in either locality, deemed it advisable, on account of the large quantities of rock encountered, to discontinue work on the ends of the lines on Washington, Guild and Pleasant streets.

Following this report will be found a balance sheet showing the expenditures and receipts, approved by the Auditors. For an account of expenditures in detail, and the cost of the various parts of the work, we refer to the statement following the balance sheet.

The full report of the Engineer is appended below, and from it will be seen that $1,100.00 will be required to meet payments due on completion of contracts. There is also an unsettled land damage, and the Commissioners, owing to the exhausted

state of the treasury, have not as yet received any compensation for their services.

About $300.00 in bills are still out, most of them being running expenses of the Pumping Station. About fifty houses take water, but the revenue at present to be derived from them is small, not exceeding $500.00. We hope another season the receipts will be largely increased.

Measures will have to be taken to provide means to meet the deficiency in running expenses.

Applications have been received for laying main pipes on Chapel, Winter, Cross, Railroad avenue, Clark and Williams streets. We would recommend the laying of pipes only on streets where there are applicants enough to guarantee the interest on the cost. We advise the town to adopt this rule for its future protection. We also recommend that the Town Treasurer be appointed treasurer of the Water Board, and that all water bills be paid by orders on the treasury, the same as other town bills.

Your Commissioners would say, that while they have endeavored to perform the duties devolving upon them in a trustworthy manner, they have been convinced that they knew very little about water works when they accepted the office, and that the satisfactory completion of the work is largely due to the practical knowledge of the Engineer and his assistants. It gives us pleasure to express our appreciation of the faithfulness of Mr. L. E. Hawes, the resident assistant, who required of the contractors and workmen under his supervision a strict compliance with the orders and plans of Mr. Blake.

J. E. Everett,
Geo. H. Morrill,
F. M. Baker,
} *Water Commissioners.*

BALANCE SHEET NORWOOD WATER WORKS, 1886.

RECEIPTS.

Jan. 27, 1886.		Dr.
For amount realized from sale of $75,000 bonds	$79,237 50	
Interest on temporary loan to town .	6 60	
Interest on deposit, N. E. Trust Co. .	262 90	
Cash received,—allowance on brick .	5 00	
		$79,512 00

EXPENDITURES.

Jan. 27, 1886.	Cr.
By bills paid as per vouchers	$77,184 89
By cash on deposit N. E. Trust Co. .	2,322 11
By cash on hand	5 00
	$79,512 00

J. E. Everett,
Geo. H. Morrill,
F. M. Baker,
} *Water Commissioners.*

Norwood, Jan. 27, 1886.

This is to certify that we have examined the books and vouchers of the Water Commissioners, and find the same to be properly vouched for and the accounts correctly kept.

George W. Gay,
Thomas J. Casey.

Norwood, Jan. 27, 1886.

STATEMENT OF COST OF WORKS, AS PER VOUCHERS PAID TO JANUARY 27, 1886.

Paid on account of	Distributing Piping	$48,773 61
"	" Bellevue Reservoir	9,474 92
"	" Bellevue Avenue	794 10
"	" Pumping Station	4,763 34
"	" Pumping Plant	4,432 43
"	" Engine and Boiler Foundations	567 70
"	" Suction Pipe and Crib	502 01
"	" Coal Shed	720 30
"	" Land Dam'g's and Rights of Way,	618 01
"	" Office and Furniture	712 31
"	" Service Pipes	1,635 90
"	" Legal and Office Expenses	498 38
"	" Engineering	3,300 00
"	" Maintenance	391 88
Cost of Works to January 27, 1886		$77,184 89

PERCY M. BLAKE, *Engineer.*

ENGINEER'S REPORT.

To

J. Edward Everett,
George H. Morrill,
F. M. Baker,
Water Commissioners,
Norwood, Mass.

Gentlemen:

I present herewith a report on the construction of the Norwood Water Works during the year 1885.

The plan and source adopted, are those described in the report of the Committee on Water Supply, dated February 6, 1885.

Water is taken directly from Buckmaster Pond, and pumped thence into a reservoir located on Bellevue Heights, a short distance from Highland Cemetery. From this reservoir a leading main conveys the water to the distributing pipes in the village.

Beginning at the source for a more detailed description, there is the usual precaution taken to prevent the admission to the suction pipe of the pumping engine, of any vegetable matter, floating refuse, or fish. The outer end of this pipe is enclosed in a wooden crib resting on the bottom of the pond, which at that point is fourteen feet below the surface of the water. The supply for the pumping engine passes into this crib through brass screens, — the finer having twenty-four meshes per inch, the coarser twelve, — which are protected against rupture from the outside by a heavy galvanized network firmly secured to the crib.

The Pumping Station lot was purchased of Samuel F. Allen, and contains very nearly two acres. The engine and boiler house was built of Taunton brick, by Frank A. Fales, of Norwood, from plans prepared by Ernest N. Boyden, architect, Boston. The draft chimney is built with independent circular core, twenty-eight inches in diameter, and is sixty-five feet high.

The Pumping Plant was furnished by the Davidson Steam Pump Company, of Brooklyn, New York, and consists of the following parts:

A Davidson compound condensing single pumping engine of following dimensions:

Diameter of initial, or high pressure cylinder,	14 inches.
" expansion, or low " "	24 "
" pump piston, or water "	14 "
Length of stroke, common to all,	24 "

One Davidson air pump and condenser,	
Diameter steam cylinder,	$5\frac{1}{2}$ "
" air "	7 "
Length of stroke,	10 "

One Davidson feed pump,

A horizontal iron boiler, tubular pattern, with shell, 54 inches diameter, 16 feet long, having sixty-eight three-inch flues, 15 feet long. The grate surface measures 55x60 inches, or $22\frac{9}{10}$ square feet, and the height of bridge-wall above grates is seventeen inches, and fire sheet above bridge-wall eight inches. This boiler is set in substantial brick work, with cast-iron front, and was made for the Davidson Company by George Miles, of South Boston. The main engine is provided with ample air chamber and automatic air-charging apparatus.

The suction pipe is twelve inches in diameter, and the forcemain ten inches. The latter is provided with a six inch blow-off a short distance from the building, by which the water pumped can be returned to the pond. The waste water from the condenser is conducted by a pipe drain to the outlet of the pond below the waste way, and passes off through the natural channel of the brook. A fire hydrant has been placed in the yard near the engine house for use when required.

The floor of the engine room is $69\frac{56}{100}$ feet below high water in the reservoir, and seven feet above high water mark in Buckmaster pond.

From the pumping station the ten inch forcemain extends "across lots" through lands of Samuel F. Allen 474 feet, Nathaniel Noyes 1739.5 feet, Francis Cheney 385.4 feet, and Lewis Thompson 787.9 feet, to a point on Winter street at the town line; thence through Winter street to Mrs. Mathew Clay's.

house, where it intersects and joins the leading main from the reservoir. On this forcemain there are a number of stop gates, one hydrant (beside the one at the pumping station), and a six inch blow-off at the town line.

The Bellevue Reservoir, located in part on land purchased of F. M. Baker, and in part on land taken from the Clay estate, is built of earth, and contains, when full to the established high water line, about 1,400,000 gallons of water.

Its capacity for varying depths is as follows:

At high water	14 feet deep	1,395,646 gallons.
At	13 " "	1,260,524 "
	12 " "	1,132,400 "
	11 " "	1,008,140 "
	10 " "	890,609 "
	9 " "	777,881 "
	8 " "	671,405 "
	7 " "	570,254 "
	6 " "	474,294 "
	5 " "	383,391 "
	4 " "	297,408 "
	3 " "	216,213 "
	2 " "	139,669 "
	1 " "	67,643 "

The dimensions of the reservoir are as follows:

At the bottom	$84\frac{8}{10}$ ft. x $104\frac{5}{10}$ ft.
" high water mark	$126\frac{8}{10}$ ft. x $146\frac{5}{10}$ ft.
" inside top of embankment	$141\frac{8}{10}$ ft. x $161\frac{5}{10}$ ft.

Inside and outer slopes are one and one-half on one; width of embankment on top, ten feet. The interior slopes are paved with hand split granite paving blocks from the quarries of the Hurricane Granite Company, Rockland, Maine. These blocks are bedded on a six inch layer of clean screened gravel, free from sand, and present a smooth surface, which can be kept clean and free from the objectionable vegetation which is inevitably present on rougher surfaces submerged only a part of the time as reservoir banks are. The bottom, or floor of the reservoir was covered with a layer of concrete six inches thick.

The inlet and outlet pipe (both being one), is fourteen inches in diameter, and terminates in the centre in a heavy casting, on which at present stands a coarse galvanized cylindrical screen. If at any time it becomes desirable to increase the head or pressure, in the distributing pipes for the purpose of serving the high district in the vicinity of the reservoir more effectively, an automatic standpipe can be erected on this casting at small expense. This reservoir was built by Mitchell & Harris, of Boston, and no effort was spared to make it trustworthy and durable. All tests so far made show it to be perfectly tight.

A strip of land, fifty feet wide, leading from, and making a natural continuation of Winter street, was taken from the Clay estate with the reservoir lot, and laid out and graded for an approach to the reservoir. The grading of this avenue was done by F. H. Hartshorne, and the result is a permanent street, making available for building purposes, land which is well adapted for development in this direction, and which would otherwise have been of little or no value, owing to its comparative remoteness from the village, its inaccessibility, and the poverty of its soil.

From Bellevue reservoir a twelve inch leading main was laid through Bellevue avenue, Winter and Walpole streets, to the junction of Guild and Washington streets, which is the central point of distribution. Other mains have been laid in streets as given in the table of pipes laid, appended to this report.

Stop gates have been placed at convenient intervals and important junctions on these street mains, for shutting off, changing the direction of circulation, and making repairs. Fifty-four fire hydrants, each competent to give two fire streams, have been set and connected by six-inch branch pipes with the street mains.

All pipes laid are standard cast iron, coated to prevent corrosion, by the best known process, and manufactured specially for the town, by the Warren Foundry and Machine Company, of Phillipsburg, New Jersey.

The entire system of distribution piping, including fire hydrants and stop gates, was furnished and laid by Mr. John

T. Langford, of Newton, Mass., under a contract with him, dated June 2, 1885.

The entire system has been tested by a direct pressure from the pumping machinery, and no leaks of importance have been developed. Owing to the difficult trenching, and the presence of much ledge to be excavated by blasting, a small part of Mr. Langford's contract remains to be done in the spring. A statement of the amount of this work will be found farther on.

The gates and hydrants adopted are from the works of the Chapman Valve Manufacturing Co., Indian Orchard, Mass.

As soon as the progress of the work would warrant, a contract was made with Mr. O. N. Bingham, of Dedham, Mass., for furnishing and laying the service pipes required for the season closing January 1, 1886, and under this contract fifty-three taps have been made on the street mains, supplying water to fifty-five individual consumers. The thoroughness of this work is so far satisfactory, and the fixtures furnished by Mr. Bingham have been first-class in pattern and quality. The service pipe used is the kind known as tar-coated wrought iron, and while not perfect, is perhaps as good as any kind of pipe used for this purpose. The experience of all water departments shows that the *best* kind of service pipe is yet undetermined, and that no coating, as yet applied to pipes so small as those required for this part of the work, is a perfect protection against occasional corrosion, or filling up.

In a few instances, applicants for water have preferred to pay the extra cost of heavy lead pipe, which has been furnished and laid without recommendation or objection.

QUALITY TESTS OF THE WORKS.

As already stated, the reservoir has withstood the test of filling with water successfully, and no leakage has been noticed. It is believed that this part of the works is a permanent and perfect construction, and that no repairs will be required, other than re-seeding the outer slopes the coming season. After a

healthy and uniform growth of grass roots is secured on these banks, no change of shape or gullying will be possible.

The distribution piping has been tested, and found competent, as previously stated.

The pumping machinery, by the terms of the contract usual in such cases, was to perform its work with a certain minimum consumption of fuel. This being an important matter to the town, much care was taken in securing a guarantee of this result from the manufacturers, and it was largely for the reason that the Davidson Company promised an economy in this respect greater than other bidders, that the contract was awarded to it.

The test prescribed by the contract is as follows:

TEST FOR ECONOMY.

"The engine shall be subjected to a duty-test in duration not less than twenty-four (24) hours, the result to be calculated under the following formula: —

$$\frac{\textit{Vertical lift} \times \textit{weight of water pumped},}{\textit{pounds of coal used, in hundreds}} = \textit{Duty}.$$

"The vertical lift being equal to the head in feet indicated by the pressure gauge in engine room when pumping into the reservoir plus the vertical distance from centre of this gauge to surface of water in pond, with no allowance for friction in pump or pipes between gauge and pond. No allowance for cinders or ashes removed during test, or remaining thereafter, to be made.

"This test shall be made under the personal direction of the Engineer of the Water Commissioners."

This test was made in December last, beginning at 4 p. m., Dec. 28, and ending at 4 p. m., Dec. 29,— twenty-four hours.

It was conducted under my general direction by Mr. William C. Munroe, mechanical engineer and agent of the Davidson Company, with the following results:

MEMORANDA OF THE DUTY TRIAL OF THE DAVIDSON PUMPING ENGINE, *made at the Pumping Station of the* NORWOOD WATER WORKS, *December 28–29, 1885,— 24 hours.*

Note.— The boiler had been under a steam pressure of not less than thirty pounds for forty-eight hours. The engine was started at 8.30 a. m., and run at varying speed continuously, pumping through a blow-off until a short time before the record was begun, when the blow-off was closed and water pumped to the reservoir which had been emptied to receive the water pumped during the test. At 4 p. m., Dec. 28, Mr. Munroe began to record the performance of the engine with the following results:

Highest temperature recorded in engine room . 73°F.
Lowest " " " " . $68\frac{1}{2}$°F.
Lowest " " outside . 32°F.
Highest " " " . 41°F.
Average steam pressure . . . . . 36.8 lbs.
Average vacuum . . . . . $25\frac{3}{4}$ inches.

Total coal weighed, $3{,}089\frac{5}{10}$ lbs.— 249 lbs. remaining after test = *$2840\frac{5}{10}$ pounds coal consumed.*

Revolutions of engine, 51,000 — 6,906 = *44,094 revolutions.*

Total lift from pond to reservoir, including friction, $110\frac{16}{100}$ feet.

Average length of stroke . . . . . $23\frac{47}{100}$ inches.
Piston travel per revolution . . . . . $3\frac{912}{1000}$ feet.
Total piston travel of test . . . . . $172{,}935\frac{7}{10}$ feet.

$172{,}935\frac{7}{10}$ ft. × $1.\frac{069}{1000}$ sq. ft. (area piston) = $184{,}868\frac{26}{100}$ cu. feet.

$\frac{1}{2}$ piston travel, $81{,}467\frac{8}{10}$ ft. × .0308 sq. ft. (area piston rod) = $2{,}509\frac{2}{10}$ cu. ft. piston rod displacement.

$184{,}868\frac{26}{100}$ cu. ft.— $2{,}509\frac{2}{10}$ cu. ft. = $182{,}359\frac{6}{100}$ cu. ft. water pumped.

$182{,}359\frac{6}{100}$ cu. ft. × $62\frac{1}{2}$ lbs. = *$11{,}397{,}441\frac{25}{100}$* lbs. *water pumped.*

$11{,}397{,}441\frac{25}{100}$ lbs. × $110\frac{16}{100}$ ft. lift = 1,255,542,128 foot pounds.

1,255,542,128 ft. lbs. ÷ 2,840$\frac{5}{10}$ lbs. coal = *44$\frac{2}{10}$ millions duty*, or 44,200,000 lbs. of water raised one foot high with 100 lbs. of coal.

The guarantee of the Davidson Company being 55,000,000, this result showed a deficiency of very nearly twenty per cent. By your direction I have duly notified the Company of this result, and requested that such improvements or alterations as may be required to enable the engine to perform its work with the economy guaranteed by the contract be made at once. When this is done, further tests will be made. The pumping station is now in charge of Mr. George A. P. Bucknam, who seems to me to be especially well fitted, by his skill and experience, for the position of permanent engineer. Provision has been made for keeping a detailed and systematic record of all pumping done, the amount of fuel used, the quantity of water raised to the reservoir, etc., on blank forms provided for the purpose.

It will be found necessary another season to adopt and set apart certain days for pumping, and I have instructed Mr. Bucknam, with your approval, to limit the variation in water level in the reservoir to five feet; that is, never to allow the water to fall lower than five feet below high water mark. This will require, next summer, pumping twice a week, perhaps for six hours a day.

CAPACITY TEST OF THE WORKS.

This was made on Saturday, December 5, 1885, and consisted in throwing directly from the hydrants, by pressure from the reservoir, eight fire streams from one inch to one and one quarter inch in diameter. These streams were delivered on Washington street, and averaged in height, when thrown vertically, about seventy-two feet. Afterwards a two inch stream was thrown, by pumping pressure, over the top of the spire of the Baptist church, estimated to be about 110 feet high. Since that test, other hydrants in more remote parts of the village have been tested, and competent fire streams thrown on adjacent buildings. There can be no doubt as to the efficiency of the works in controlling any incipient fire.

COST OF THE WORKS.

I have prepared a sheet showing cost of the various parts of the work, which is subjoined to this report. With, and following it, you will also find a memorandum of the streets in which pipes have been laid, and a list of levels.

From the statement of cost you will see that the amount expended to January 27, 1886, is $77,184.

There yet remains to be paid, on account of work done under the piping, machinery, and service pipe contracts, the following amounts:

Due John T. Langford,	$1,927 34
Due Davidson Steam Pump Co. when guarantee is fulfilled,	1,295 76
Due O. N. Bingham,	265 13
To be added to expenditures as above,	$3,488 32

Making $80,672.32 as the *gross cost of the Works, January 27, 1886.*

The statement of the cost of laying the pipe on hand (the cost of the pipe itself being included in the gross cost given above), is as follows: —

For laying 4,500 feet 6-inch pipe @ 25 cents,	$1,125 00
For setting 6 hydrants (on hand and paid for), @ $5.00,	30 00
For furnishing and setting six 6-inch gates @ $16.57,	99 42
For excavating rock, 60 cubic yards @ $4.00,	240 00
	$1,494 42

The summary of these accounts is as follows: —

Gross cost of works to January 27, 1886, including liabilities,	$80,672 32
Cost of completing piping contract	1,494 42
Total,	$82,166 72

From the balance sheet prepared for the examination of the Auditors, total receipts from sale of bonds, interest and cash, is	$79,512 00
Balance, ...	$2,654 74
Less amount due from water-takers for service-pipes, including Smith Brothers' hydrant, ...	$1,555 13
Amount required to complete contracts, . .	$1,099 61

At your request I have prepared an estimate of the cost of piping the following streets, viz. : —

Chapel,— from Washington to Walpole,	2,671 feet.
Winter,— from Washington to Walpole,	849 "
Cross,— from Guild easterly, ...	1,146 "
Railroad Ave.,— from Wash'n to Prospect,	2,500 "
Total length (to be six inch pipe), . .	7,166 feet.
Clark and William Streets (four inch), . .	680 "

7,166 feet 6-inch pipe laid @ 72 cents, . .	$5,159 52
680 feet 4-inch pipe laid @ 58 cents . . .	394 40
12 hydrants set @ $37.86	454 32
10 6-inch gates set @ $16.57	165 70
2 4-inch gates set @ $13.00	26 00
159 cubic yards rock excavated @ $4.00 .	636 00
Superintendance and inspection	500 00
Total, ...	$7,335 94

Mr. Langford having agreed to furnish and lay any extensions desired for the very reasonable prices fixed by his contract for last season, the above estimate is more favorable than could be expected were the town to ask for proposals at this date for the work. I would recommend, however, that after the original schedule of piping is laid, that no extensions be made except under a reasonable guarantee of water rates from property owners whose estates would be benefited thereby.

I am largely indebted for whatever success has attended the prosecution of this work, to the kind and hearty support given by your Board, and to the skill and faithfulness of Mr. L. E. Hawes, assistant engineer. I believe your town is now in possession of a system of water works equal to all reasonable demands for many years to come.

Respectfully submitted,

PERCY M. BLAKE, *Civil Engineer.*

Norwood, Mass., Feb. 1, 1886.

MEMORANDUM OF PIPE LAID IN 1885.

STREET	FROM	TO	12"	10"	8"	6"
Forcemain	Pumping Station	Leading Main,		6935.0		
Leading Main	Reservoir	Guild Street,	3994.0			
Walpole	Winter	southerly,			4069.0	
Washington	Guild	Howard,		2206.3		
"	Howard	J. C. Page's,			1217.0	
"	Guild	southerly,			3815.2	
Guild	Washington	car shops,	61.5	11.0	2408.0	
Beech	Winter	Vernon,				825.5
Day	Washington	Beech,				1013.5
Vernon	"	westerly,				1968.0
Cottage	"	Nichols,				1293.5
Maple	Vernon	northerly,				12.0
Nichols	Nahatan	G. H. Morrill's				2135.0
Nahatan	Washington	westerly,				18.0
Howard	"	"				7.0
Market	"	Railroad Avenue,				1061.0
Railroad Avenue	"	easterly,			1734.0	690.5
Hill	Railroad Avenue	northerly,				600.0
Pleasant	"	southerly,				1006.0
Monroe	"	"				634.5
Chapel	Washington	westerly,				12.0
Hydrant Branches and Blowoffs,						792.9
Total, 38,520.4 feet, or 7.3 miles.			4055.5	9152.3	13,243.2	12,069.4

PERCY M. BLAKE, *Engineer.*

LIST OF LEVELS.

DESCRIPTION.	Above mean sea level in Boston Harbor.	Below high water in Bellevue Reservoir.	Height of hydrant stream.
High water level in proposed reservoir	248.1	0	0
Buckmaster pond, high water	171.7	76.4	42
Engine room floor	178.5	69.6	40
Winter street at town line	167.6	80.5	45
" " bed of brook	164.0	84.1	48
" " at Cemetery summit	218.5	29.6	18
" " at Prospect street	210.6	37.5	22
Underpinning of Fairbanks' house, Prospect street	208.8	39.3	24
" of G. H. Morrill's new house	193.0	55.1	33
Intersection Winter and Nichols streets	191.6	56.5	35
" " " Beech streets	174.0	74.1	45
" " " Walpole streets	143.0	105.1	62
Underpinning Congregational church	160.0	88.1	52
Intersection Walpole and Phillips streets	160.0	88.1	52
Summit of Walpole street, opposite Mackenzie's	161.5	86.6	52
Underpinning residence of F. O. Winslow	167.0	81.1	50
Underpinning residence of J. M. Robbins	89.0	159.1	95
R. R. track at Winslow's	92.8	155.3	92
Intersection Washington and Chapel streets	98.0	150.1	90
Underpinning old Congregational church	111.1	137.0	80
Intersection Washington street and Walnut ave.	108.0	140.1	80
Underpinning residence J. E. Everett	121.5	116.6	70
Intersection Washington street and Everett ave.	115.0	133.1	75
Underpinning Everett school house	127.7	120.4	72
Intersection Washington and Guild streets	132.5	115.6	67
" Guild and Linden streets	118.4	129.7	75
R. R. track at Guild street	110.2	137.9	75
Underpinning northwest corner of "setting up shop," N. Y. & N. E. R. R. Co.	106.0	142.1	82
Intersection Day and Washington streets	125.0	123.1	72
Underpinning Baptist church	124.9	123.2	72
Intersection Vernon and Washington streets	121.6	126.5	72
" Cottage and Washington streets	120.6	127.5	72
Threshold Village Hall building	122.7	125.4	72
Intersection Nahatan and Washington streets	132.0	116.1	70
" R. R. avenue and Washington street	133.0	115.1	70
Top of reservoir, near Cemetery	142.2	105.9	62
Intersection Howard and Washington streets	144.0	104.1	62
Washington street, opp. residence of J. C. Page	144.0	104.1	62
Intersection Nahatan and Maple streets	130.7	111.4	65
" " " Nichols "	148.4	99.7	60
" " " Fulton "	171.0	71.1	45
" " " Prospect "	176.7	71.4	42
" Nichols and Cottage "	170.5	77.6	45
" " and Vernon "	174.7	73.4	43
" Beech and Day streets	171.4	76.7	45
" " " Vernon streets	168.7	79.4	47
" Day " Maple "	168.7	79.4	47
" Vernon " " "	161.6	86.5	51
" Cottage and " "	148.1	100.0	60

LIST OF LEVELS. — *Continued.*

DESCRIPTION.	Above mean sea level in Boston Harbor.	Below high water in Bellevue Reservoir.	Height of hydrant stream.
Intersection Day and Bullard streets	158.6	89.5	53
" Market street and Railroad avenue . .	134.6	113.5	65
R. R. track at Railroad avenue	128.7	119.4	70
Intersection Railroad ave. and Hill street	128.9	119.2	70
" " " " Foundry street . . .	136.0	112.1	67
" " " " Clark " . . .	118.9	129.2	75
" " " " Monroe " . . .	109.2	138.9	80
" " " " Pleasant " . . .	107.0	141.1	82
" Pleasant and Cross streets	90.2	157.9	90
Underpinning residence J. E. Hartshorn	109.9	138.2	80

PERCY M. BLAKE, *Engineer.*

[Chapter 82.]

An Act to supply the Town of Norwood with Water.

Be it enacted, etc., as follows:

Sect. 1. The Town of Norwood may supply itself and its inhabitants with water for the extinguishment of fires and for domestic and other purposes; may establish fountains and hydrants, re-locate or discontinue the same; may regulate the use of such water, and fix and collect rates to be paid for the use of the same.

Sect. 2. The said town for the purposes aforesaid may take, by purchase or otherwise, and hold the waters of Buckmaster Pond and of Foundry or Colburn's Brook, in the Town of Dedham, and the waters which flow into and from the same, together with any water rights connected therewith, and also all lands, rights of way and easements necessary for holding and preserving such water, and for conveying the same to any part of said Town of Norwood, and may erect on the land thus taken or held proper dams, buildings, fixtures and other structures, and may make excavations, procure and operate machinery, and provide such other means and appliances as may be necessary for the establishment and maintenance of complete and effective water works; and may construct and lay down conduits, pipes and other works under or over any lands, water courses, railroads or public or private ways, and along any such way in such manner as not unnecessarily to obstruct the same; and for the purpose of constructing, maintaining and repairing such conduits, pipes and other works, and for all proper purposes of this Act, said town may dig up any such lands, and under the direction of the Board of Selectmen of the town in which any such ways are situated, may enter upon and dig up any such ways, in such manner as to cause the least hindrance to public travel on such ways.

Sect. 3. The said town shall, within sixty days after the taking of any lands, rights of way, water rights, water sources or easements as aforesaid, otherwise than by purchase, file and cause to be recorded in the registry of deeds for the county within which such lands or other property are situated, a description thereof sufficiently accurate for identification, with a statement of the purpose for which the same were taken, signed by the Water Commissioners hereinafter provided for.

Sect. 4. The said town shall pay all damages sustained by any person or corporation in property by the taking of any land, right of way, water, water source, water right or easement, or by any other thing done by said town under the authority of this Act. Any person or corporation sustaining damages as aforesaid under this Act who fails to agree with said town as to the amount of damages sustained, may have the damages assessed and determined in the manner provided by law when land is taken for the laying out of highways, on application at any time within the period of three years from the taking of such land or other property, or the doing of other injury under the authority of this Act; but no such application shall be made after the expiration of said three years. No application for assessment of damages shall be made for the taking of any water, water right, or for any injury thereto, until the water is actually withdrawn or diverted by said town under the authority of this Act.

Sect. 5. The said town may, for the purpose of paying the necessary expenses and liabilities incurred under the provisions of this Act, issue from time to time bonds, notes, or scrip, to an amount not exceeding in the aggregate seventy-five thousand dollars; such bonds, notes and scrip shall bear on their face the words "Norwood Water Loan;" shall be payable at the expiration of periods not exceeeding thirty years from the date of issue; shall bear interest payable semi-annually, at a rate not exceeding six per centum per annum, and shall be signed by the treasurer of the town, and be countersigned by the Water Commissioners hereinafter provided for. The said town may sell such securities at public or private sale, or pledge the same for money borrowed for the purposes of this Act, upon such terms and conditions as it may deem proper.

The said town shall provide, at the time of contracting said loan, for the establishment of a sinking fund, and shall annually contribute to such a fund a sum sufficient, with the accumulations thereof, to pay the principal of said loan at maturity. The said sinking fund shall remain inviolate and pledged to the payment of said loan, and shall be used for no other purpose.

SECT. 6. The said town instead of establishing a sinking fund may, at the time of authorizing said loan, provide for the payment thereof in such annual proportionate payments as will extinguish the same within the time prescribed in this Act; and when such vote has been passed, the amount required thereby shall without further vote be assessed by the assessors of said town in each year thereafter, until the debt incurred by said loan shall be extinguished, in the same manner as other taxes are assessed under the provisions of Section thirty-four of Chapter eleven of the Public Statutes.

SECT. 7. The return required by Section ninety-one of Chapter eleven of the Public Statutes shall state the amount of any sinking fund established under this act, and if none is established whether action has been taken in accordance with the provisions of the preceding section, and the amounts raised and applied thereunder for the current year.

SECT. 8. The said town shall raise annually by taxation a sum which, with the income derived from the water rates, will be sufficient to pay the current annual expenses of operating its water works, and the interest as it accrues on the bonds, notes and scrip issued as aforesaid by said town, and to make such contributions to the sinking fund and payments on the principal as may be required under the provisions of this Act.

SECT. 9. The said town may contract with the Dedham Water Company for a supply of water necessary for the purposes of this Act, on such terms as may be agreed upon between said town and said corporation; and said Dedham Water Company is authorized to contract for and furnish, from its water supply, water to said town, and to make the necessary connections of its conduits or pipes with the conduits or pipes of the said town: *provided*, that nothing herein contained shall be construed to compel the said corporation to make such connections or to furnish said water.

Sect. 10. Whoever wilfully or wantonly corrupts, pollutes or diverts any of the waters taken or held under this Act, or injures any structure, work or other property owned, held or used by said town under the authority and for the purposes of this Act, shall forfeit and pay to said town three times the amount of damages assessed therefor, to be recovered in an action of tort; and upon conviction of either of the above wilful or wanton acts shall be punished by a fine not exceeding three hundred dollars, or by imprisonment not exceeding one year.

Sect. 11. The said town shall, after its acceptance of this Act, at a legal meeting called for the purpose, elect by ballot three persons to hold office, one until the expiration of three years, one until the expiration of two years, and one until the expiration of one year from the next succeeding annual town meeting, to constitute a Board of Water Commissioners; and at each annual town meeting thereafter, one such Commissioner shall be elected by ballot for the term of three years. All the authority granted to the said town by this Act, and not otherwise specifically provided for, shall be vested in said Board of Water Commissioners, who shall be subject, however, to such instructions, rules and regulations as said town may impose by its vote; the said Commissioners shall be trustees of the sinking fund herein provided for, and a majority of said Commissioners shall constitute a quorum for the transaction of business relative both to the water works and to the sinking fund. Any vacancy occuring in said board from any cause may be filled for the remainder of the unexpired term by said town at any legal town meeting called for the purpose.

Sect. 12. This Act shall take effect upon its acceptance by a two-thirds vote of the voters of said town, present and voting thereon at a legal town meeting called for the purpose, within three years from its passage; but the number of meetings so called in any year shall not exceed three.

[*Approved March 18, 1885.*]

RULES AND WATER RATES.

The following rates are established until further notice, viz.:

DWELLING HOUSES.

	Per Year.
Occupied by one family for the first faucet	$6 00
For each additional faucet to be used by the same family	2 00
If occupied by more than one family, one faucet being used by all, for each family	5 00
If occupied by more than one family, each family having one faucet, for each family	6 00
For the first bath tub	5 00
If used by more than one family in same house, each family	4 00
For each additional bath tub	2 00
For the first water closet	5 00
If used by more than one family in same house, each family	4 00
For each additional water closet	2 00
For first laundry faucet	5 00
For each additional faucet	2 00

Where two faucets are used, one for hot and one for cold water, emptying into the same basin, only one charge will be made for both.

BOARDING HOUSES.

For first faucet	$10 00
For each additional faucet	3 00
For first bath tub	10 00
For each additional bath tub	3 00
For first water closet	10 00
For each additional water closet	3 00

Or if so determined by the Water Commissioners, water to be measured. (See Measured Water.)

HOTELS.

Water to be measured. (See Measured Water.)

OFFICES, STORES, MARKETS AND BARBER SHOPS.

When used for ordinary purposes, same rates as for *dwelling houses.*

STABLES.

For first horse	$5 00
For each additional horse	2 00
For first cow or ox	2 00
For each additional cow	1 00

The above prices include water for washing carriages without hose. Where hose is used $5.00 per year will be charged for same with ¼ inch nozzle, and $10.00 per year for ½ inch.

HOSE.

For sprinkling premises and streets in front, nozzle not to exceed ¼ of an inch in diameter, and use limited to two hours per day for six months in the year $5 00

MANUFACTURING PURPOSES.

(See Measured Water.)

BUILDING PURPOSES.

For cask of lime or cement $0.06

For fountains, green houses, garden hydrants, or other purposes not herein mentioned, special rates will be made by the Water Commissioners.

MEASURED WATER.

Where water is measured the consumers must provide and keep in repair at his expense, a meter of a pattern approved by the Water Commissioners. Where a meter is put in for the purpose of measuring the water used by the consumer, a minimum water rate to be paid in advance will be charged, which will cover the cost of a certain yearly quantity of water, and all water drawn in excess of such quantity shall be paid for by the thousand gallons.

Where a meter is put in for the above purpose, the minimum annual rate shall in *no case be less than ten dollars.*

METER RATES.

A consumer using *not more than 100,000 gallons* of water per annum, shall pay (semi-annually in advance) a minimum annual rate of ten dollars, which payment shall entitle him to use forty thousand gallons of water per year for one year, and thirty cents for each and every thousand gallons of water drawn in excess of this quantity.

A consumer using *more than 100,000* and less than 500,000 gallons of water per annum, shall pay (semi-annually in advance) a minimum annual rate of twenty dollars, which payment shall entitle him to use one hundred thousand gallons of water per year for one year, and twenty-five cents for each and every thousand gallons of water drawn in excess of this quantity.

A consumer using *more than 500,000 gallons* of water per annum, shall pay (semi-annually in advance) a minimum annual rate of one hundred dollars, which payment shall entitle him to use five hundred thousand gallons of water per year for one year, and twenty cents for each and every thousand gallons of water drawn in excess of this quantity.

REGULATIONS OF THE NORWOOD WATER WORKS.

The following regulations, until further notice, shall be considered a part of the contract with every person who uses water:

1.—All applications for the use of water must be made at the office of the Water Commissioners, and state fully the purposes for which it is intended to be used.

2.—All persons using water must furnish pipes, connections and all fixtures, and keep them in good repair and protected from frost at their own expense, and the Commissioners will not be liable for any damage resulting from a failure to do so. No person will be permitted to insert or cause to be inserted, any faucet in any water pipe or connect any service pipe for conveying water from any of the main or distributing pipes to any house, building or manufactory, or for any purpose whatever, without the written permission of the Superintendent of the Works; nor shall any addition to, or alteration of, any water pipe or faucet be made without such written permission.

3.—The water must in no case be left running to prevent freezing or for other purposes, without the permission of the Water Commissioners or their duly authorized agent.

4.—Schedule water rates shall be payable at the office of the Commissioners semi-annually in advance, beginning at such time as the water may be let on, of which notice will be hereafter given. Meter rates shall be payable quarterly.

5.—When water is supplied to more than one party through a single tap, the water may be shut off in case of non-payment of either party, notwithstanding one or more of the parties may have paid his or their amount due.

6.—Owners of premises will be held responsible for the water rents of their tenants.

7.—No water taker shall supply water to parties not entitled to its use except by written permit.

8.—All apparatus and places supplied with water must be accessible at all times to the inspection of the Commissioners or their agent, and all pipes and fixtures shall be subject to rejection by said Board if considered unsuitable for the purpose.

9.—Water will be furnished for external fire protection free of charge, but no one will be allowed to use water through fire hydrants or pipes for any other purpose, except upon a written permit from the Board of Commissioners.

10.—The Commissioners reserve the right to restrict the use of hose or fountains, to shut off the water in all cases when it becomes necessary to make extensions or repairs, or for violation of any of the regulations; or to put in meters for the purpose of measuring the quantity of water used.